

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTASXJ1617

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\*\*\*\*\* Welcome to STN International \*\*\*\*\*

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	OCT 02	CA/Capius enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS	3	OCT 19	BEILSTEIN updated with new compounds
NEWS	4	NOV 15	Derwent Indian patent publication number format enhanced
NEWS	5	NOV 19	WPIX enhanced with XML display format
NEWS	6	NOV 30	ICSD reloaded with enhancements
NEWS	7	DEC 04	LINPADOCDB now available on STN
NEWS	8	DEC 14	BEILSTEIN pricing structure to change
NEWS	9	DEC 17	USPATOLD added to additional database clusters
NEWS	10	DEC 17	IMSDRUGCONF removed from database clusters and STN
NEWS	11	DEC 17	DGENE now includes more than 10 million sequences
NEWS	12	DEC 17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS	13	DEC 17	MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS	14	DEC 17	CA/Capius enhanced with new custom IPC display formats
NEWS	15	DEC 17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS	16	JAN 02	STN pricing information for 2008 now available
NEWS	17	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	18	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	19	JAN 28	MARPAT searching enhanced
NEWS	20	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	21	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	22	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS	23	FEB 08	STN Express, Version 8.3, now available
NEWS	24	FEB 20	PCI now available as a replacement to DPCI
NEWS	25	FEB 25	IFIREF reloaded with enhancements
NEWS	26	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS	27	FEB 29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification
NEWS EXPRESS	FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008		
NEWS HOURS	STN Operating Hours Plus Help Desk Availability		
NEWS LOGIN	Welcome Banner and News Items		
NEWS IPC8	For general information regarding STN implementation of IPC 8		

Enter NEWS followed by the item number or name to see news on that specific topic.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 09:18:00 ON 19 MAR 2008

```
=> file reg
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                               ENTRY      SESSION
FULL ESTIMATED COST          0.21        0.21
```

FILE 'REGISTRY' ENTERED AT 09:18:12 ON 19 MAR 2008

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STRUCTURE FILE UPDATES: 18 MAR 2008 HIGHEST RN 1008796-87-9

DICTIONARY FILE UPDATES: 18 MAR 2008 HIGHEST RN 1008796-87-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10561173.str



```
chain nodes :
6  7  8  9 10 11 12 13 14 15 16 17 18
ring nodes :
1  2  3  4  5
chain bonds :
3-6  3-7  5-8  8-9  9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18
ring bonds :
1-2  1-5  2-3  3-4  4-5
exact/norm bonds :
1-2  1-5  2-3  3-4  4-5
```

exact bonds :  
3-6 3-7 5-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS  
18:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

FULL SEARCH INITIATED 09:18:34 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 5324 TO ITERATE

100.0% PROCESSED 5324 ITERATIONS

233 ANSWERS

SEARCH TIME: 00.00.02

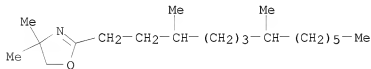
L2 233 SEA SSS FUL L1

=> d scan

L2 233 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Oxazole, 2-(3,7-dimethyltridecyl)-4,5-dihydro-4,4-dimethyl-

MF C20 H39 N O

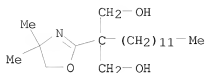


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L2 233 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

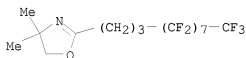
IN 1,3-Propanediol, 2-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-2-dodecyl-  
MF C20 H39 N O3



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):  
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L2 233 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
IN Oxazole, 2-(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)-  
4,5-dihydro-4,4-dimethyl-  
MF C16 H14 F17 N O



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s 11  
SAMPLE SEARCH INITIATED 09:19:29 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 269 TO ITERATE

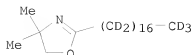
100.0% PROCESSED 269 ITERATIONS 8 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 4396 TO 6364  
PROJECTED ANSWERS: 8 TO 329

L3 8 SEA SSS SAM L1

=> d scan 1-8  
'1-8' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

L3 8 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
IN Oxazole, 2-(heptadecyl-d35)-4,5-dihydro-4,4-dimethyl- (9CI)  
MF C22 H8 D35 N O



The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN  
 SAM - Index Name, MF, and structure - no RN  
 FIDE - All substance data, except sequence data  
 IDE - FIDE, but only 50 names  
 SQIDE - IDE, plus sequence data  
 SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used  
 SQD - Protein sequence data, includes RN  
 SQD3 - Same as SQD, but 3-letter amino acid codes are used  
 SQN - Protein sequence name information, includes RN  
 CALC - Table of calculated properties  
 EPROP - Table of experimental properties  
 PROP - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

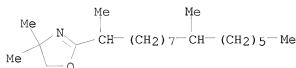
ABS -- Abstract  
 APPS -- Application and Priority Information  
 BIB -- CA Accession Number, plus Bibliographic Data  
 CAN -- CA Accession Number  
 CBIB -- CA Accession Number, plus Bibliographic Data (compressed)  
 IND -- Index Data  
 IPC -- International Patent Classification  
 PATS -- PI, SO  
 STD -- BIB, IPC, and NCL  
 IABS -- ABS, indented, with text labels  
 IBIB -- BIB, indented, with text labels  
 ISTD -- STD format, indented  
 OBIB ----- AN, plus Bibliographic Data (original)  
 OIBIB ----- OBIB, indented with text labels  
 SBIB ----- BIB, no citations  
 SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.  
 The MAX format is the same as ALL.  
 The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDs -- To see a complete list of individual display fields.  
 HELP FORMATS -- To see detailed descriptions of the predefined formats.  
 HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1): 1

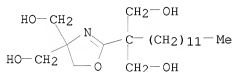
L3 8 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN Oxazole, 2-(1,9-dimethylpentadecyl)-4,5-dihydro-4,4-dimethyl-  
 MF C22 H43 N O



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 8 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN 4,4(5H)-Oxazolidimethanol, 2-[1,1-bis(hydroxymethyl)tridecyl]-  
 MF C20 H39 N O5

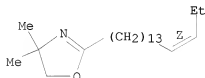


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 8 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN Oxazole, 2-(14Z)-14-heptadecenyl-4,5-dihydro-4,4-dimethyl- (9CI)  
 MF C22 H41 N O

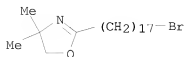
Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

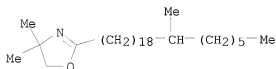
L3 8 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN Oxazole, 2-(17-bromoheptadecyl)-4,5-dihydro-4,4-dimethyl-  
 MF C22 H42 Br N O



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

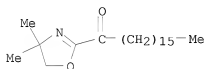
L3 8 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN Oxazole, 4,5-dihydro-4,4-dimethyl-2-(19-methylpentacosyl)-  
 MF C31 H61 N O



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 8 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN 1-Heptadecanone, 1-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-  
 MF C22 H41 N O2



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

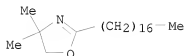
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

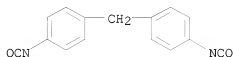
L3 8 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN 7aH-Oxazolo[2,3-b]oxazole, tetrahydro-7a-methyl-, polymer with  
 2-heptadecyl-4,5-dihydro-4,4-dimethyloxazole and 1,1'-methylenebis[4-  
 isocyanatobenzene] (9CI)  
 MF (C22 H43 N O . C15 H10 N2 O2 . C6 H11 N O2)x  
 CI PMS



CM 2



CM 3



ALL ANSWERS HAVE BEEN SCANNED

=> file hcaplus  
 COST IN U.S. DOLLARS  
 FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
180.20	180.41

FILE 'HCAPLUS' ENTERED AT 09:20:58 ON 19 MAR 2008  
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FILE COVERS 1907 - 19 Mar 2008 VOL 148 ISS 12  
 FILE LAST UPDATED: 18 Mar 2008 (20080318/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.



=> s 12

L4 148 L2

=> s 14/thu

FIELD CODES CANNOT BE CHANGED HERE

You may have tried to apply a field code to a term that already has a field code. You can only add a field code to a term that has no field code appended to it.

=> s 12/thu

148 L2

989725 THU/RL

L5 2 L2/THU

(L2 (L) THU/RL)

=> d 15

L5 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:1147502 HCAPLUS

DN 145:460556

TI Depigmenting or brightening cosmetic composition comprising at least one oxazolin as an active ingredient

IN Msika, Philippe; Piccardi, Nathalie

PA Laboratoires Expanscience, Fr.

SO PCT Int. Appl., 31pp.

CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----		-----	-----	-----
PI	WO 2006114443	A1	20061102	WO 2006-EP61902	20060427
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	FR 2885128	A1	20061103	FR 2005-4227	20050427
	FR 2885128	B1	20070706		
	EP 1874410	A1	20080109	EP 2006-754908	20060427
	R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR			
	KR 2008000641	A	20080102	KR 2007-725815	20071107
PRAI	FR 2005-4227	A	20050427		
	WO 2006-EP61902	W	20060427		

OS MARPAT 145:460556

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 15 2

L5 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2003:516842 HCAPLUS

DN 139:79182

TI Cosmetic or pharmaceutical composition containing an oxazoline to inhibit  
the migration of the cells of Langerhans  
IN Msika, Philippe; Piccardi, Nathalie; Piccirilli, Antoine  
PA Laboratoires Pharmascience, Fr.  
SO Fr. Demande, 25 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2834216	A1	20030704	FR 2001-16917	20011227
	FR 2834216	B1	20040430		
	CA 2472190	A1	20030710	CA 2002-2472190	20021227
	WO 2003055463	A1	20030710	WO 2002-FR4583	20021227
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002365026	A1	20030715	AU 2002-365026	20021227
	EP 1458349	A1	20040922	EP 2002-805813	20021227
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	CN 1617704	A	20050518	CN 2002-827692	20021227
	JP 2005517671	T	20050616	JP 2003-556041	20021227
	US 2005075380	A1	20050407	US 2004-499976	20040624
	MX 2004PA06418	A	20041110	MX 2004-PA6418	20040628
PRAI	FR 2001-16917	A	20011227		
	WO 2002-FR4583	W	20021227		

OS MARPAT 139:79182

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file reg

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST

21.25 201.66

FILE 'REGISTRY' ENTERED AT 09:25:02 ON 19 MAR 2008

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STRUCTURE FILE UPDATES: 18 MAR 2008 HIGHEST RN 1008796-87-9

DICTIONARY FILE UPDATES: 18 MAR 2008 HIGHEST RN 1008796-87-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

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<http://www.cas.org/support/stngen/stndoc/properties.html>

=> s l1/rn

QUALIFICATION NOT VALID FOR L1

Field code qualifications can only be applied to text terms.

=> s l2/rn

'RN' IS NOT A VALID CROSSOVER QUALIFIER FOR L2

Answer sets created in a different file may be field qualified with a limited set of qualifiers. Enter HELP CROSSOVER at an arrow prompt (=) for specific information.

=> s l4 and PY<2004

'2004' NOT A VALID FIELD CODE

0 PY<2004

L6 0 L4 AND PY<2004

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

1.38

203.04

FILE 'HCAPLUS' ENTERED AT 09:26:40 ON 19 MAR 2008

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FILE COVERS 1907 - 19 Mar 2008 VOL 148 ISS 12

FILE LAST UPDATED: 18 Mar 2008 (20080318/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l4 and PY<2004

23979945 PY<2004

L7 140 L4 AND PY<2004

=> s l4 and PY<2003

22929470 PY<2003

L8 133 L4 AND PY<2003

=> d scan l8 l-133 ibib abs

'1-133' IS NOT A VALID FORMAT FOR FILE 'HCAPLUS'

L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
IC C07D002-610  
CC 36-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 28  
TI 2-Oxazoline derivatives and antioxidant compositions containing them  
ST phenolic oxazoline antioxidant polypropylene; EPDM antioxidant phenolic  
oxazoline  
IT Antioxidants  
(hindered phenolic oxazolines, for polypropylene and EPDM)  
IT Rubber, synthetic  
(ethylene-ethylidenenorbornane-propene-, antioxidants for, hindered  
phenolic oxazolines as)  
IT 9003-07-0  
RL: USES (Uses)  
(antioxidants for, hindered phenolic oxazolines as)  
IT 75182-56-8  
RL: USES (Uses)  
(antioxidants, for polypropylene)  
IT 74217-69-9 74217-76-8  
RL: USES (Uses)  
(antioxidants, for polypropylene and EPDM, preparation of)  
IT 74217-72-4 74217-74-6 75152-26-0 75152-28-2 75182-55-7  
75182-57-9 75182-58-0 75182-59-1 75182-62-6 75182-63-7  
75182-64-8 75182-65-9 75192-42-6 75360-45-1 77924-43-7  
RL: USES (Uses)  
(antioxidants, for polypropylene, preparation of)  
IT 98-73-7 111-17-1 118-91-2 124-04-9, reactions  
RL: USES (Uses)  
(condensation of, with aminotris(hydroxymethyl)methane)  
IT 57-11-4, reactions 62-23-7 64-19-7, reactions 65-85-0, reactions  
69-72-7, reactions 142-62-1, reactions 143-07-7, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation of, with aminotris(hydroxymethyl)methane)  
IT 4271-18-5P 14466-50-3P 19896-25-4P 24448-01-9P  
57101-61-8P 62203-32-1P 75152-27-1P 75152-29-3P 75152-30-6P  
75152-31-7P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and esterification of)  
IT 75152-24-8P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction with formaldehyde)  
IT 74217-77-9P 74217-78-0P 75152-25-9P 75152-32-8P 75173-84-1P  
75182-54-6P  
RL: PREP (Preparation)  
(preparation of)  
IT 77-86-1 115-69-5 115-70-8 124-68-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with (dibutylhydroxyphenyl)propionic acid)  
IT 3062-64-4  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with (hydroxymethyl)oxazoline)  
IT 79-37-8  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with (hydroxymethyl)oxazolines)  
IT 20170-32-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with amino alcs.)  
IT 25038-36-2

RL: USES (Uses)  
(rubber, antioxidants for, hindered phenolic oxazolines as)

The following are valid formats:

ABS ----- GI and AB  
ALL ----- BIB, AB, IND, RE  
APPS ----- AI, PRAI  
BIB ----- AN, plus Bibliographic Data and PI table (default)  
CAN ----- List of CA abstract numbers without answer numbers  
CBIB ----- AN, plus Compressed Bibliographic Data  
CLASS ----- IPC, NCL, ECLA, FTERM  
DALL ----- ALL, delimited (end of each field identified)  
DMAX ----- MAX, delimited for post-processing  
FAM ----- AN, PI and PRAI in table, plus Patent Family data  
FBIB ----- AN, BIB, plus Patent FAM  
IND ----- Indexing data  
IPC ----- International Patent Classifications  
MAX ----- ALL, plus Patent FAM, RE  
PATS ----- PI, SO  
SAM ----- CC, SX, TI, ST, IT  
SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;  
              SCAN must be entered on the same line as the DISPLAY,  
              e.g., D SCAN or DISPLAY SCAN)  
STD ----- BIB, CLASS  
  
IABS ----- ABS, indented with text labels  
IALL ----- ALL, indented with text labels  
IBIB ----- BIB, indented with text labels  
IMAX ----- MAX, indented with text labels  
ISTD ----- STD, indented with text labels  
  
OBIB ----- AN, plus Bibliographic Data (original)  
OIBIB ----- OBIB, indented with text labels  
  
SBIB ----- BIB, no citations  
SIBIB ----- IBIB, no citations  
  
HIT ----- Fields containing hit terms  
HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)  
              containing hit terms  
HITRN ----- HIT RN and its text modification  
HITSTR ----- HIT RN, its text modification, its CA index name, and  
              its structure diagram  
HITSEQ ----- HIT RN, its text modification, its CA index name, its  
              structure diagram, plus NTE and SEQ fields  
FHITSTR ----- First HIT RN, its text modification, its CA index name, and  
              its structure diagram  
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its  
              structure diagram, plus NTE and SEQ fields  
KWIC ----- Hit term plus 20 words on either side  
OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR,

FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

```
L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN
IC ICM C07D413-06
CC 35-7 (Chemistry of Synthetic High Polymers)
TI Process for production of polyoxazolines from 2-alkyl-4,4-
bis(hydroxymethyl)-2-oxazolines
ST polyoxazoline prodn alkylhydroxymethyloxazoline ring opening polymn; boron
trifluoride etherate catalyst polyoxazoline prodn
IT Polyamines
RL: IMF (Industrial manufacture); PREP (Preparation)
(polyethylene-, N-acyl; process for production of polyoxazolines from
2-alkyl-4,4-bis(hydroxymethyl)-2-oxazolines)
IT 104-15-4, p-Toluenesulphonic acid, uses 109-63-7, Boron trifluoride
etherate 7550-45-0, Titanium tetrachloride, uses 7646-78-8, Stannic
chloride, uses
RL: CAT (Catalyst use); USES (Uses)
(process for production of polyoxazolines from 2-alkyl-4,4-
bis(hydroxymethyl)-2-oxazolines)
IT 737758-56-4P 737758-57-5P 737758-59-7P
737758-61-1P
RL: IMF (Industrial manufacture); PREP (Preparation)
(process for production of polyoxazolines from 2-alkyl-4,4-
bis(hydroxymethyl)-2-oxazolines)
```

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> dscan l8 1-133 ibib abs

DSKAN IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter

"HELP COMMANDS" at an arrow prompt (=>).

=> d scan l8 1-133 ibib abs

'1-133' IS NOT A VALID FORMAT FOR FILE 'HCAPLUS'

```
L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN
CC 23-16 (Aliphatic Compounds)
TI α-Substituted acrylic acids
ST fatty acid aminodimethylpropanol condensation; acrylic acid alpha
substituted deriv; tetradecylacrylate; acrylate tetradecyl
IT 57-10-3, reactions 103-82-2, reactions 111-14-8 501-52-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with aminodimethylpropanol)
IT 61-19-8, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with fatty acids)
IT 78763-97-0P 78763-98-1P 78764-02-0P 80991-12-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and hydrolysis of)
IT 492-38-6P 4436-84-4P 5669-19-2P 6818-50-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
```

The following are valid formats:

ABS ----- GI and AB

ALL ----- BIB, AB, IND, RE

APPS ----- AI, PRAI  
 BIB ----- AN, plus Bibliographic Data and PI table (default)  
 CAN ----- List of CA abstract numbers without answer numbers  
 CBIB ----- AN, plus Compressed Bibliographic Data  
 CLASS ----- IPC, NCL, ECLA, FTERM  
 DALL ----- ALL, delimited (end of each field identified)  
 DMAX ----- MAX, delimited for post-processing  
 FAM ----- AN, PI and PRAI in table, plus Patent Family data  
 FBIB ----- AN, BIB, plus Patent FAM  
 IND ----- Indexing data  
 IPC ----- International Patent Classifications  
 MAX ----- ALL, plus Patent FAM, RE  
 PATS ----- PI, SO  
 SAM ----- CC, SX, TI, ST, IT  
 SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;  
                   SCAN must be entered on the same line as the DISPLAY,  
                   e.g., D SCAN or DISPLAY SCAN)  
 STD ----- BIB, CLASS  
  
 IABS ----- ABS, indented with text labels  
 IALL ----- ALL, indented with text labels  
 IBIB ----- BIB, indented with text labels  
 IMAX ----- MAX, indented with text labels  
 ISTD ----- STD, indented with text labels  
  
 OBIB ----- AN, plus Bibliographic Data (original)  
 OIBIB ----- OBIB, indented with text labels  
  
 SBIB ----- BIB, no citations  
 SIBIB ----- IBIB, no citations  
  
 HIT ----- Fields containing hit terms  
 HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)  
                   containing hit terms  
 HITRN ----- HIT RN and its text modification  
 HITSTR ----- HIT RN, its text modification, its CA index name, and  
                   its structure diagram  
 HITSEQ ----- HIT RN, its text modification, its CA index name, its  
                   structure diagram, plus NTE and SEQ fields  
 FHITSTR ----- First HIT RN, its text modification, its CA index name, and  
                   its structure diagram  
 FHITSEQ ----- First HIT RN, its text modification, its CA index name, its  
                   structure diagram, plus NTE and SEQ fields  
 KWIC ----- Hit term plus 20 words on either side  
 OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
 CC 17 (Pharmaceuticals, Cosmetics, and Perfumes)  
 TI Cosmetic astringents  
 IT Astringents

(oxazoline derivs.)

IT 30969-75-6, Oxazoline  
(derivs., cosmetic astringents containing)

IT 2581-46-6P, 2-Oxazoline-4-methanol, 2-hendecyl-4-methyl-  
10431-84-2P, 2-Oxazoline, 2-hendecyl- 24448-01-9P,  
2-Oxazoline-4,4-dimethanol, 2-hendecyl- 24448-07-5P,  
2-Oxazoline-4-methanol, 4-ethyl-2-hendecyl- 46921-17-9P,  
2-Oxazoline, 2-hendecyl-4,4-dimethyl- 53416-48-1P, 2-Oxazoline-4-  
methanol, 2-ethyl-4-methyl- 57101-63-0P, 2-Oxazoline-4-methanol,  
4-ethyl-2-heptyl- 69851-07-6P, 2-Oxazoline, 2-octyl- 93841-63-5P  
, 2-Oxazoline-4-methanol, 4-methyl-2-tridecyl- 98552-62-6P,  
2-Oxazoline-4-methanol, 2-isopropyl-4-methyl- 270263-30-4P,  
2-Oxazoline-4,4-dimethanol, 2-heptyl- 861012-44-4P, 2-Oxazoline-4-  
methanol, 2-heptyl- 861012-45-5P, 2-Oxazoline-4-methanol,  
4-ethoxy-2-octyl-  
RL: PREP (Preparation)  
(preparation of)

L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
CC 23-16 (Aliphatic Compounds)  
TI Novel synthesis of  $\alpha$ -substituted acrylic acids  
ST acrylic acid  $\alpha$  substituted; carboxylic acid methylenation  
IT Carboxylic acids, preparation  
RL: SPN (Synthetic preparation); PREP (Preparation)  
( $\alpha$ -methylene, preparation of)

IT 501-52-0  
RL: PROC (Process)  
(conversion of, to  $\alpha$ -methylene derivative)

IT 57-10-3, reactions 103-82-2, reactions 111-14-8  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(conversion of, to  $\alpha$ -methylene derivative)

IT 1569-08-0P 51849-53-7P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and hydroxymethylation of)

IT 78763-97-0P 78763-98-1P 78763-99-2P 78764-00-8P  
78764-01-9P 78764-02-0P 78764-03-1P  
78764-04-2P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and ring cleavage of, acrylic acid derivative from)

IT 492-38-6P 1118-91-8P 3760-10-9P 4380-88-5P 4436-84-4P 5669-19-2P  
6818-50-4P 6818-51-5P 33780-98-2P 33785-92-1P 52756-21-5P  
69858-94-2P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

IT 124-68-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with carboxylic acids,  $\alpha$ -methylene derivs. from)

L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
CC 10 (Organic Chemistry)  
TI 2-Oxazolines  
IT 504-77-8, 2-Oxazoline  
(derivs.)

IT 1772-43-6P, 2-Oxazoline, 2,4,4-trimethyl- 19312-06-2P, 2-Oxazoline,  
4,4-dimethyl-2-phenyl- 46921-17-9P, 2-Oxazoline,  
2-hendecyl-4,4-dimethyl- 86015-22-7P, 2-Oxazoline-4,4-dimethanol,  
2-methyl-, diacetate 90088-15-6P, 2-Oxazoline-4-methanol, 2,4-dimethyl-,  
acetate  
RL: PREP (Preparation)  
(preparation of)



L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
 IC C07D002-610  
 CC 36-6 (Plastics Manufacture and Processing)  
 Section cross-reference(s): 28  
 TI 2-Oxazoline derivatives and antioxidant compositions containing them  
 ST phenolic oxazoline antioxidant polypropylene; EPDM antioxidant phenolic  
 oxazoline  
 IT Antioxidants  
 (hindered phenolic oxazolines, for polypropylene and EPDM)  
 IT Rubber, synthetic  
 (ethylene-ethylidenenorbornane-propene-, antioxidants for, hindered  
 phenolic oxazolines as)  
 IT 9003-07-0  
 RL: USES (Uses)  
 (antioxidants for, hindered phenolic oxazolines as)  
 IT 75182-56-8  
 RL: USES (Uses)  
 (antioxidants, for polypropylene)  
 IT 74217-69-9 74217-76-8  
 RL: USES (Uses)  
 (antioxidants, for polypropylene and EPDM, preparation of)  
 IT 74217-72-4 74217-74-6 75152-26-0 75152-28-2 75182-55-7  
 75182-57-9 75182-58-0 75182-59-1 75182-62-6 75182-63-7  
 75182-64-8 75182-65-9 75192-42-6 75360-45-1 77924-43-7  
 RL: USES (Uses)  
 (antioxidants, for polypropylene, preparation of)  
 IT 98-73-7 111-17-1 118-91-2 124-04-9, reactions  
 RL: USES (Uses)  
 (condensation of, with aminotris(hydroxymethyl)methane)  
 IT 57-11-4, reactions 62-23-7 64-19-7, reactions 65-85-0, reactions  
 69-72-7, reactions 142-62-1, reactions 143-07-7, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (condensation of, with aminotris(hydroxymethyl)methane)  
 IT 4271-18-5P 14466-50-3P 19896-25-4P 24448-01-9P  
 57101-61-8P 62203-32-1P 75152-27-1P 75152-29-3P 75152-30-6P  
 75152-31-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and esterification of)  
 IT 75152-24-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and reaction with formaldehyde)  
 IT 74217-77-9P 74217-78-0P 75152-25-9P 75152-32-8P 75173-84-1P  
 75182-54-6P  
 RL: PREP (Preparation)  
 (preparation of)  
 IT 77-86-1 115-69-5 115-70-8 124-68-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with (dibutylhydroxyphenyl)propionic acid)  
 IT 3062-64-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with (hydroxymethyl)oxazoline)  
 IT 79-37-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with (hydroxymethyl)oxazolines)  
 IT 20170-32-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with amino alcs.)  
 IT 25038-36-2  
 RL: USES (Uses)

(rubber, antioxidants for, hindered phenolic oxazolines as)

L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
IC ICM C07D413-06  
CC 35-7 (Chemistry of Synthetic High Polymers)  
TI Process for production of polyoxazolines from 2-alkyl-4,4-bis(hydroxymethyl)-2-oxazolines  
ST polyoxazoline prodn alkylhydroxymethylloxazoline ring opening polymn; boron trifluoride etherate catalyst polyoxazoline prodn  
IT Polyamines  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(polyethylene-, N-acyl; process for production of polyoxazolines from 2-alkyl-4,4-bis(hydroxymethyl)-2-oxazolines)  
IT 104-15-4, p-Toluenesulphonic acid, uses 109-63-7, Boron trifluoride etherate 7550-45-0, Titanium tetrachloride, uses 7646-78-8, Stannic chloride, uses  
RL: CAT (Catalyst use); USES (Uses)  
(process for production of polyoxazolines from 2-alkyl-4,4-bis(hydroxymethyl)-2-oxazolines)  
IT 737758-56-4P 737758-57-5P 737758-59-7P  
737758-61-1P  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(process for production of polyoxazolines from 2-alkyl-4,4-bis(hydroxymethyl)-2-oxazolines)  
L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
IC C10M001-48  
INCL 252046700  
CC 51-7 (Fossil Fuels, Derivatives, and Related Products)  
Section cross-reference(s): 28  
TI Phosphorus-containing compounds and lubricants containing them  
ST Lubricating oil antiwear oxazoline; phosphorodithioate lubricating oil oxazoline; phosphorodithioate lubricating oil oxazoline; amine phosphorodithioate lubricating oil oxazoline; vinyl monomer lubricating oil  
IT Lubricating oil additives  
(lubricity agents, reaction products of (oxazolinyl methyl) phosphorodithioates with amines or vinyl monomers, manufacturing properties of)  
IT 108-05-4D, reaction products with (oxazolinylmethyl) phosphorodithioates  
109-92-2D, reaction products with (oxazolinylmethyl) phosphorodithioates  
111-34-2D, reaction products with (oxazolinylmethyl) phosphorodithioates  
112-90-3D, reaction products with (oxazolinylmethyl) phosphorodithioates  
7173-62-8D, reaction products with (oxazolinylmethyl) phosphorodithioates  
15834-33-0D, bis(oxazolinylmethyl) esters, derivs. 77617-82-4D, reaction products with phosphorus pentasulfide and amines or vinyl monomers  
RL: USES (Uses)  
(lubricity agents, for lubricating oils)  
IT 112-80-1, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with Tris)  
IT 77-86-1  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with oleic acid)  
L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
CC 12-1 (Nonmammalian Biochemistry)  
Section cross-reference(s): 26  
TI Chemical composition of the sponge Chondrosia reniformis from the Canary Islands  
ST lipid fatty acid sterol hydrocarbon amino acid compn sponge; Chondrosia lipid fatty acid sterol hydrocarbon amino acid compn

IT New natural products  
(8,10-dimethylhexadecanoic acid)

IT Fatty acids, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(esters; fatty acid, sterol, hydrocarbon, and amino acid compns. of sponge *Chondrosia reniformis*)

IT *Chondrosia reniformis*  
Volatile substances  
(fatty acid, sterol, hydrocarbon, and amino acid compns. of sponge *Chondrosia reniformis*)

IT Alcohols, biological studies  
Aldehydes, biological studies  
Amino acids, biological studies  
Fatty acids, biological studies  
Hydrocarbons, biological studies  
Sterols  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(fatty acid, sterol, hydrocarbon, and amino acid compns. of sponge *Chondrosia reniformis*)

IT Lipids, biological studies  
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
(fatty acid, sterol, hydrocarbon, and amino acid compns. of sponge *Chondrosia reniformis*)

IT Molecular structure, natural product  
(of 8,10-dimethylhexadecanoic acid)

IT 56-41-7, L-Alanine, biological studies 56-81-5, Glycerol, biological studies 57-10-3, Hexadecanoic acid, biological studies 57-11-4, Octadecanoic acid, biological studies 57-88-5, Cholesterol, biological studies 60-12-8,  $\beta$ -Phenyl ethyl alcohol 60-18-4, L-Tyrosine, biological studies 61-90-5, L-Leucine, biological studies 63-91-2, L-Phenylalanine, biological studies 65-71-4, 2,4-Dihydroxy-5-methylpyrimidine 65-85-0, Benzoic acid, biological studies 66-22-8, 2,4-Dihydroxypyrimidine, biological studies 69-89-6 72-18-4, L-Valine, biological studies 72-19-5, L-Threonine, biological studies 73-32-5, L-Isoleucine, biological studies 75-12-7, Formamide, biological studies 95-48-7, 2-Methylphenol, biological studies 98-79-3, L-5-Oxoproline 100-51-6, Benzyl alcohol, biological studies 100-52-7, Benzaldehyde, biological studies 110-15-6, Butanedioic acid, biological studies 112-05-0, Nonanoic acid 112-39-0, Hexadecanoic acid methyl ester 112-80-1, Oleic acid, biological studies 112-85-6, Docosanoic acid 123-96-6, 2-Octanol 124-06-1, Tetradecanoic acid ethyl ester 124-10-7, Tetradecanoic acid methyl ester 147-85-3, L-Proline, biological studies 373-49-9, 9Z-Hexadecenoic acid 434-16-2, A7-Cholesterol 474-63-5, 24-Methylcholesta-5,24(28)-dien-3 $\beta$ -ol 474-67-9, 24-Methylcholesta-5,22-dien-3 $\beta$ -ol 503-06-0 506-12-7, Heptadecanoic acid 506-17-2, 11Z-Octadecenoic acid 506-30-9, Eicosanoic acid 506-32-1 544-63-8, Tetradecanoic acid, biological studies 544-76-3, Hexadecane 557-59-5, Tetracosanoic acid 593-45-3, Octadecane 628-97-7, Hexadecanoic acid ethyl ester 629-78-7, Heptadecane 646-30-0, Nonadecanoic acid 1002-84-2, Pentadecanoic acid 1068-84-4, Aminomalonic acid 1603-03-8 1623-06-9 2363-71-5, Heneicosanoic acid 2433-96-7, Tricosanoic acid 2485-71-4 2724-57-4 4669-02-7 5502-94-3 5598-38-9 5618-00-8 5918-29-6 6036-58-4, Cholest-7-en-3 $\beta$ -ol 6064-63-7, 2-Hydroxyhexanoic acid 10030-73-6, Palmitelaidic acid 10417-94-4, 5Z,8Z,11Z,14Z,17Z-Eicosapentaenoic acid 14721-66-5, 3,7,11,15-Tetramethylhexadecanoic acid 17001-21-7, 9-Methyltetradecanoic acid 18472-36-1, 24-Ethylcholesta-5,24(28)-dien-3 $\beta$ -ol 19044-06-5, 24-Ethylcholest-5-en-3 $\beta$ -ol 23929-42-2, 24-Methylcholest-5-en-3 $\beta$ -ol 26033-10-3, (22Z)-Cholesta-5,22-dien-3 $\beta$ -ol 26549-54-2, 5Z,9Z-Octadecadienoic acid 27234-05-5, Octadecenoic acid methyl ester 28040-00-8, Heptadecenoic acid

32345-19-0, 24-Ethylcholesta-5,22-dien-3 $\beta$ -ol 34347-28-9,  
 (22E)-Cholesta-5,22-dien-3 $\beta$ -ol 35199-78-1, 3-Methylpentadecanoic  
 acid 36332-93-1 41114-00-5, Pentadecanoic acid ethyl ester  
 42172-35-0, 3-Methylhexadecanoic acid 50298-92-5, 24-Ethylcholestan-  
 3 $\beta$ -ol 52715-55-6, 5Z,9Z-Hexacosadienoic acid 52715-56-7,  
 5Z,9Z,19Z-Hexacosatrienoic acid 53228-01-6, 24-Ethylcholesta-7,22-dien-  
 3 $\beta$ -ol 59708-73-5 59708-74-6 65128-48-5, 3-Methyltetradecanoic  
 acid 71987-24-1, Methyl docosanoic acid 71987-26-3, Methyleneicosanoic  
 acid 79605-28-0, 11-Methyloctadecanoic acid 80648-66-4,  
 11Z-Nonadecenoic acid 81570-28-7 86527-16-4 118885-06-6,  
 5Z,9Z-Docosadienoic acid 120903-53-9, 5Z,9Z-Nonacosadienoic acid  
 124029-64-7, 5Z,9Z-Pentacosadienoic acid 129596-72-1,  
 5Z,9Z-Hexadecadienoic acid 129596-73-2, 5Z,9Z-Heptacosadienoic acid  
 129596-74-3, 5Z,9Z-Octacosadienoic acid 133530-14-0, 5Z,9Z-Eicosadienoic  
 acid 160296-59-3, 5Z,9Z-Heptadecadienoic acid 161925-93-5,  
 5Z,9Z-Tricosadienoic acid 514202-56-3, Methyltetradecanoic acid  
 591765-83-2 591765-84-3 591765-85-4, 5Z,9Z,23Z-Heptacosatrienoic acid  
 591778-34-6 591778-35-7 591778-37-9

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (fatty acid, sterol, hydrocarbon, and amino acid compns. of sponge  
*Chondrosia reniformis*)

IT 223614-49-1P, 8,10-Dimethylhexadecanoic acid  
 RL: NPO (Natural product occurrence); PRP (Properties); PUR (Purification  
 or recovery); BIOL (Biological study); OCCU (Occurrence); PREP  
 (Preparation)  
 (fatty acid, sterol, hydrocarbon, and amino acid compns. of sponge  
*Chondrosia reniformis*)

IT 591765-86-5 591765-87-6  
 RL: PRP (Properties)  
 (mass spectrum of)

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IC C10M001-32

CC 51-6 (Fossil Fuels, Derivatives, and Related Products)  
 Section cross-reference(s): 28

TI Bisoxazolines as additives useful in oleaginous compositions

ST oxazoline gasoline antirust lubricant dispersant

IT Gasoline additives

(corrosion inhibitors, oxazoline derivs. as)

IT Lubricating oil additives

(dispersants, oxazoline derivs. as)

IT 77621-64-8P 77621-65-9P 77699-54-8P 77699-59-3P

RL: PREP (Preparation)

(preparation of and additives for gasoline and lubricating oils)

IT 77716-23-5P

RL: PREP (Preparation)

(preparation of in additives for gasoline and lubricating oils)

IT 124-68-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with alkenylsuccinic anhydrides)

IT 67066-88-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with amino alcs.)

IT 42482-06-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with aminomethylpropanol)

IT 77-86-1

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with diisobutenylsuccinic anhydride)

IT 71697-44-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with tris(hydroxymethyl)aminomethane)

L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
 CC 12-1 (Nonmammalian Biochemistry)  
 TI Lipid composition of the sponge *Verongia aerophoba* from the Canary Islands  
 ST fatty acid compn lipid sponge *Verongia*  
 IT Fatty acids, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (esters; lipid composition of sponge *Verongia aerophoba*)  
 IT *Verongia aerophoba*  
 Volatile substances  
 (lipid composition of sponge *Verongia aerophoba*)  
 IT Amino acids, biological studies  
 Fatty acids, biological studies  
 Hydrocarbons, biological studies  
 Sterols  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (lipid composition of sponge *Verongia aerophoba*)  
 IT Lipide, biological studies  
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
 (Biological study)  
 (lipid composition of sponge *Verongia aerophoba*)  
 IT 56-40-6, Glycine, biological studies 56-41-7, L-Alanine, biological  
 studies 56-81-5, Glycerol, biological studies 57-10-3, Hexadecanoic  
 acid, biological studies 57-11-4, Octadecanoic acid, biological studies  
 57-88-5, Cholest-5-en-3 $\beta$ -ol, biological studies 60-33-3, Linoleic  
 acid, biological studies 66-22-8, 2,4-Dihydroxypyrimidine, biological  
 studies 68-94-0 69-89-6 80-97-7, 5 $\alpha$ -Cholestan-3 $\beta$ -ol  
 83-48-7, 24-Ethylcholesta-5,22-dien-3 $\beta$ -ol 100-51-6, Benzyl alcohol,  
 biological studies 107-21-1, 1,2-Ethandiol, biological studies  
 108-21-4, Isopropylacetate 112-12-9, 2-Undecanone 112-80-1, Oleic  
 acid, biological studies 112-85-6, Docosanoic acid 124-07-2, Octanoic  
 acid, biological studies 373-49-9, cis-9-Hexadecenoic acid 474-67-9,  
 24-Methylcholesta-5,22-dien-3 $\beta$ -ol 503-06-0 506-12-7,  
 Heptadecanoic acid 506-17-2, cis-11-Octadecenoic acid 506-30-9,  
 Eicosanoic acid 506-32-1, all-cis-5,8,11,14-Eicosatetraenoic acid  
 544-63-8, Tetradecanoic acid, biological studies 544-76-3, Hexadecane  
 557-59-5, Tetracosanoic acid 593-45-3, Octadecane 629-59-4,  
 Tetradecane 629-78-7, Heptadecane 629-94-7, Heneicosane 629-97-0,  
 Docosane 646-30-0, Nonadecanoic acid 1002-84-2, Pentadecanoic acid  
 1603-03-8 1981-50-6, cis-9-Heptadecenoic acid 2363-71-5, Heneicosanoic  
 acid 2364-23-0, Clerosterol 2416-20-8, cis-11-Hexadecenoic acid  
 2485-71-4 2724-56-3 4669-02-7 5502-94-3 5598-38-9,  
 11Z,14Z-Eicosadienoic acid 5618-00-8 5681-98-1 5918-29-6  
 7664-38-2, Phosphoric acid, biological studies 10030-73-6, Palmitelaidic  
 acid 10417-94-4, all-cis-5,8,11,14,17-Eicosapentaenoic acid  
 14721-66-5, Phytanic acid 17001-26-2, 10-Methylhexadecanoic acid  
 17105-72-5, 24-Methyl-5 $\alpha$ -cholestan-3 $\beta$ -ol 17735-97-6,  
 15Z-Docosenoic acid 19186-12-0 23929-42-2, 24-Methylcholest-5-en-  
 3 $\beta$ -ol 26033-10-3, (22Z)-Cholesta-5,22-dien-3 $\beta$ -ol 26549-54-2,  
 5Z,9Z-Octadecadienoic acid 28039-99-8 36332-93-1 36378-43-5  
 38636-49-6, Aplysterol 52715-55-6, 5Z,9Z-Hexacosadienoic acid  
 52936-69-3, Codisterol 54278-89-6, Occelasterol 56362-45-9  
 59708-73-5 62649-56-3 71486-09-4 73768-92-0, 5Z,9Z,23Z-  
 Triacontatrienoic acid 79605-28-0, 11-Methyloctadecanoic acid  
 80648-66-4, cis-11-Nonadecenoic acid 94245-49-5 99095-17-7  
 107949-01-9, 14-Methyleicosanoic acid 118885-06-6, 5Z,9Z-Docosadienoic  
 acid 118885-07-7, 5Z,9Z-Tetracosadienoic acid 129596-73-2,  
 5Z,9Z-Heptacosadienoic acid 129596-74-3, 5Z,9Z-Octacosadienoic acid  
 129596-75-4, 5Z,9Z,21Z-Octacosatrienoic acid 152336-65-7,  
 5Z,9Z-Untriacontadienoic acid 161925-93-5, 5Z,9Z-Tricosadienoic acid  
 501369-55-7, 18-Methyltetracosanoic acid 501369-57-9 501369-62-6  
 501380-70-7

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (lipid composition of sponge Verongia aerophoba)

IT 501369-58-0 501369-59-1 501369-60-4 501369-61-5  
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
 (Biological study)  
 (lipid composition of sponge Verongia aerophoba)

IT 437987-18-3P, 5Z,9Z,22Z-Nonacosatrienoic acid 501369-56-8P,  
 20-Methylhexacosanoic acid  
 RL: NPO (Natural product occurrence); PRP (Properties); PUR (Purification  
 or recovery); BIOL (Biological study); OCCU (Occurrence); PREP  
 (Preparation)  
 (lipid composition of sponge Verongia aerophoba)

L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
 IC C07D261-04; C09K015-20  
 CC 36-6 (Plastics Manufacture and Processing)  
 Section cross-reference(s): 28  
 TI 2-Oxazoline derivatives useful as antioxidants  
 ST oxazoline antioxidant polypropylene; EPDM antioxidant oxazoline; phenol  
 hindered oxazoline antioxidant  
 IT Antioxidants  
 (hindered phenol oxazoline derivs., for polypropylene and EPDM rubber)

IT Rubber, synthetic  
 RL: USES (Uses)  
 (ethylene-ethylidenenorbornene-propene, antioxidants for, hindered  
 phenol oxazoline derivs. as)

IT 9003-07-0  
 RL: USES (Uses)  
 (antioxidants for, hindered phenol oxazoline derivs. as)

IT 74217-69-9 74217-76-8  
 RL: USES (Uses)  
 (antioxidants, for polypropylene and EPDM rubber, preparation of)

IT 74217-72-4 74217-74-6 75152-26-0 75152-28-2 75182-55-7  
 75182-56-8 75182-57-9 75182-58-0 75182-59-1 75182-60-4  
 75182-61-5 75182-62-6 75182-63-7 75182-64-8 75182-65-9  
 75192-42-6  
 RL: USES (Uses)  
 (antioxidants, for polypropylene, preparation of)

IT 115-69-5 115-70-8 124-68-5  
 RL: USES (Uses)  
 (condensation of, with (dialkylhydroxyphenyl)propionic acid)

IT 20170-32-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (condensation of, with amino alcs.)

IT 77-86-1  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (condensation of, with carboxylic acids)

IT 98-73-7 111-17-1 118-91-2 124-04-9, reactions  
 RL: USES (Uses)  
 (condensation of, with tris(hydroxymethyl)aminomethane)

IT 57-11-4, reactions 62-23-7 64-19-7, reactions 65-85-0, reactions  
 69-72-7, reactions 142-62-1, reactions 143-07-7, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (condensation of, with tris(hydroxymethyl)aminomethane)

IT 4271-18-5P 19896-25-4P 62203-32-1P 74217-78-0P 75152-27-1P  
 75152-29-3P 75152-30-6P 75152-31-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and esterification of)

IT 14466-50-3P 24448-01-9P 57101-61-8P  
 RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and esterification of, with rearrangement)

IT 74217-77-9P 75152-24-8P 75152-25-9P 75152-32-8P 75173-84-1P  
 75182-54-6P  
 RL: PREP (Preparation)  
 (preparation of)

IT 79-37-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with (hydroxymethyl)oxazolines)

IT 25038-36-2  
 RL: USES (Uses)  
 (rubber, antioxidants for, hindered phenol oxazoline derivs. as)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):  
 HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS ON STN  
 CC 55-10 (Ferrous Metals and Alloys)  
 Section cross-reference(s): 72

TI Evaluation of three oxazolines as corrosion inhibitors by electrochemical techniques

ST steel atm corrosion inhibitor oxazoline electrochem evaluation

IT Corrosion  
 (atmospheric; evaluation of three oxazolines as corrosion inhibitors by electrochem. techniques)

IT Corrosion inhibitors  
 Electric impedance  
 Polarization  
 Polarization resistance  
 (evaluation of three oxazolines as corrosion inhibitors by electrochem. techniques)

IT Electric potential  
 (potential-time relationship; evaluation of three oxazolines as corrosion inhibitors by electrochem. techniques)

IT 14466-50-3 15655-33-1 30969-75-6, Oxazoline  
 62203-32-1  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (evaluation of three oxazolines as corrosion inhibitors by electrochem. techniques)

IT 12725-36-9, AISI 1020, processes  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
 (evaluation of three oxazolines as steel corrosion inhibitors by electrochem. techniques)

L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS ON STN  
 CC C07D263-14; C08K005-35  
 CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 36

TI 2-Oxazoline derivatives

ST oxazoline antioxidant plastic; cyclocondensation phenylpropionic acid aminomethylpropanol

IT Plastics  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (antioxidants for, oxazoline derivs. as)

IT Antioxidants  
 (oxazoline derivs., for plastics)

IT 124-68-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cyclocondensation of, with (dibutylhydroxyphenyl)propionic acid)

IT 20170-32-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cyclocondensation of, with aminomethylpropanol)

IT 4271-18-5P 14466-50-3P 19896-25-4P 24448-01-9P

57101-61-8P	62203-32-1P	74217-69-9P	74217-72-4P	
74217-74-6P	74217-76-8P	74217-77-9P	74217-78-0P	75152-24-8P
75152-25-9P	75152-26-0P	75152-27-1P	75152-28-2P	75152-29-3P
75152-30-6P	75152-31-7P	75152-32-8P	75173-84-1P	75182-54-6P
75182-55-7P	75182-57-9P	75182-58-0P	75182-59-1P	75182-61-5P
75182-62-6P	75182-63-7P	75182-64-8P	75182-65-9P	75192-42-6P
75360-45-1P				

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
IC ICM C07C321-04  
CC 23-16 (Aliphatic Compounds)  
TI Method for preparation of pentadecanoic acid derivatives  
ST mercaptomethylpentadecanoic acid prepn radioactive pharmaceutical  
IT Radiopharmaceuticals  
(method for preparation of 15-mercapto-3-methylpentadecanoic acid as radiopharmaceutical via bromination of dodecanediol to bromodecanol, hydroxy-protection with THP, and coupling with 2-ethyl-4,4-dimethyl-2-oxazoline)  
IT 62-56-6, Thiourea, reactions 98-59-9, Tosyl chloride 143-33-9, Sodium cyanide 5146-88-3, 2-Ethyl-4,4-dimethyl-2-oxazoline 5675-51-4, 1,12-Dodecanediol  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(method for preparation of 15-mercapto-3-methylpentadecanoic acid as radiopharmaceutical via bromination of dodecanediol to bromodecanol, hydroxy-protection with THP, and coupling with 2-ethyl-4,4-dimethyl-2-oxazoline)  
IT 3344-77-2P, 12-Bromododecan-1-ol 88517-92-4P 393588-42-6P 393588-43-7P 393588-44-8P 393588-45-9P 393588-46-0P 393588-47-1P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(method for preparation of 15-mercapto-3-methylpentadecanoic acid as radiopharmaceutical via bromination of dodecanediol to bromodecanol, hydroxy-protection with THP, and coupling with 2-ethyl-4,4-dimethyl-2-oxazoline)  
IT 393588-48-2P  
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(method for preparation of 15-mercapto-3-methylpentadecanoic acid as radiopharmaceutical via bromination of dodecanediol to bromodecanol, hydroxy-protection with THP, and coupling with 2-ethyl-4,4-dimethyl-2-oxazoline)  
L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
IC C07D; C09K  
CC 36-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 28  
TI Substituted oxazolines  
ST polyolefin antioxidant oxazoline phenol; paraffin antioxidant oxazoline phenol; PVC antioxidant oxazoline phenol  
IT Polyamides, uses and miscellaneous  
RL: USES (Uses)  
(antioxidants for, phenols containing oxazoline rings as)  
IT Phenols, preparation  
RL: PREP (Preparation)  
(manufacture of, containing oxazoline rings, as antioxidants)  
IT Heterocyclic compounds  
RL: USES (Uses)  
(oxazolines containing phenol groups, manufacture of, as antioxidants)  
IT Antioxidants  
(phenols containing oxazoline rings, manufacture of)



IT 9002-86-2 9002-88-4 9003-07-0 9003-53-6 9003-56-9 26544-17-2  
 74239-09-1  
 RL: USES (Uses)  
 (antioxidants for, phenols containing oxazoline rings as)

IT 74217-69-9P 74217-70-2P 74217-71-3P 74217-72-4P  
 74217-73-5P 74217-74-6P 74217-75-7P 74217-76-8P 74217-77-9P  
 74227-51-3P 74227-52-4P  
 RL: PREP (Preparation)  
 (antioxidants, manufacture of)

IT 77-86-1 115-69-5 115-70-8  
 RL: USES (Uses)  
 (cyclization and esterification with (carboxyalkyl)phenols)

IT 74217-78-0P  
 RL: PREP (Preparation)  
 (preparation and esterification with (hydroxyphenyl)propionic acid derivs.)

IT 1611-03-6P 20170-32-5P 24794-55-6P  
 RL: PREP (Preparation)  
 (preparation and esterification with aminopropanediol derivs.)

IT 955-01-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and reaction with sodium cyanide)

IT 1611-07-0P 29027-77-8P 58822-57-4P  
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PREP  
 (Preparation); PROC (Process); RACT (Reactant or reagent)  
 (preparation and reduction of)

IT 128-39-2 2219-62-1  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with acrylonitrile)

IT 57-11-4, reactions 124-04-9, reactions 124-07-2, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with amino(hydroxymethyl)propanediol)

IT 107-13-1, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with phenol derivs.)

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IC ICM C11D001-52

ICS C09K003-00; C11D001-58; C11D003-28; C11D003-32

CC 62-4 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 46

TI Thickeners containing alkanolamides and nitrogen heterocycles and  
 detergent compositions containing the thickeners

ST detergent compn alkanolamide hydroxymethylloxazoline thickener;  
 hydroxymethylpropyllauramide undecylhydroxymethylloxazoline thickener skin  
 detergent

IT Amides, biological studies  
 RL: BUU (Biological use, unclassified); TEM (Technical or engineered  
 material use); BIOL (Biological study); USES (Uses)  
 (N-(hydroxyalkyl); thickeners containing alkanolamides and nitrogen  
 heterocycles for detergent compns.)

IT Quaternary ammonium compounds, biological studies  
 RL: BUU (Biological use, unclassified); TEM (Technical or engineered  
 material use); BIOL (Biological study); USES (Uses)  
 (alkylbenzyltrimethyl, chlorides; thickeners containing alkanolamides and  
 nitrogen heterocycles for detergent compns.)

IT Surfactants  
 (amphoteric; thickeners containing alkanolamides and nitrogen heterocycles  
 for detergent compns.)

IT Surfactants  
 (anionic; thickeners containing alkanolamides and nitrogen heterocycles for  
 detergent compns.)

IT Surfactants  
(cationic; thickeners containing alkanolamides and nitrogen heterocycles for detergent compns.)

IT Cosmetics  
(cleansing; thickeners containing alkanolamides and nitrogen heterocycles for detergent compns.)

IT Amides, biological studies  
RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)  
(coco, N,N-bis(hydroxyethyl); thickeners containing alkanolamides and nitrogen heterocycles for detergent compns.)

IT Amides, biological studies  
RL: BUU (Biological use, unclassified); MOA (Modifier or additive use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)  
(coco, N-[bis(hydroxymethyl)alkyl] derivs.; thickeners containing alkanolamides and nitrogen heterocycles for detergent compns.)

IT Fatty acids, biological studies  
RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)  
(coco, potassium salts; thickeners containing alkanolamides and nitrogen heterocycles for detergent compns.)

IT Detergents  
(dishwashing; thickeners containing alkanolamides and nitrogen heterocycles for detergent compns.)

IT Cosmetics  
(face cleansers; thickeners containing alkanolamides and nitrogen heterocycles for detergent compns.)

IT Surfactants  
(nonionic; thickeners containing alkanolamides and nitrogen heterocycles for detergent compns.)

IT Surfactants  
(semipolar; thickeners containing alkanolamides and nitrogen heterocycles for detergent compns.)

IT Detergents  
Shampoos  
Thickening agents  
(thickeners containing alkanolamides and nitrogen heterocycles for detergent compns.)

IT Soaps  
RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)  
(thickeners containing alkanolamides and nitrogen heterocycles for detergent compns.)

IT Surfactants  
(zwitterionic; thickeners containing alkanolamides and nitrogen heterocycles for detergent compns.)

IT 115-69-5D, N-cocoyl derivs. 115-70-8D, N-cocoyl derivs.  
2581-46-6 24305-65-5 24448-07-5 35922-65-7  
57101-67-4D, 2-coco alkyl derivs.  
RL: BUU (Biological use, unclassified); MOA (Modifier or additive use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)  
(thickeners containing alkanolamides and nitrogen heterocycles for detergent compns.)

IT 121-54-0, Benzethonium chloride 4292-10-8, Lauramidopropyl betaine  
9002-92-0, Polyoxyethylene lauryl ether 9004-82-4, Polyoxyethylene lauryl ether sodium sulfate 21668-16-6 32289-26-2 59149-04-1D, N-Carboxymethyl-N-hydroxyethylimidazolinium betaine, N-cocoyl derivs.  
61792-31-2 69670-85-5, AMISOFT GS 11  
RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(thickeners containing alkanolamides and nitrogen heterocycles for detergent compns.)

L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
IC C09K003-00; G01K011-00  
CC 36-6 (Plastics Manufacture and Processing)  
TI Organic heat-sensitive materials  
ST elec blanket thermoregulator; heat sensitive polyamide oxazoline  
IT Polyamides, uses and miscellaneous  
RL: USES (Uses)  
(bis(hydroxymethyl)heptadecyloxazoline-containing, heat-sensitive, for elec. blanket thermoregulators)  
IT Heat-sensitive materials  
(polyamides, containing bis(hydroxymethyl)heptadecyloxazoline, for elec. blanket thermoregulators)  
IT Thermoregulators  
(polyamides, containing bis(hydroxymethyl)heptadecyloxazoline, for elec. blankets)  
IT Household furnishings  
(elec. blankets, heat-sensitive materials for, polyamides containing bis(hydroxymethyl)heptadecyloxazoline as)  
IT 25035-04-5 25587-80-8  
RL: USES (Uses)  
(bis(hydroxymethyl)heptadecyloxazoline-containing, heat-sensitive, for elec. blanket thermoregulators)  
IT 14466-50-3 20103-35-9  
RL: USES (Uses)  
(polyamides containing, heat-sensitive, for elec. blanket thermoregulators)  
  
L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
IC ICM C07D263-10  
ICS A61K007-00; A61K007-075; A61K007-48; C11D001-94; C11D001-52; C11D003-28  
CC 62-4 (Essential Oils and Cosmetics)  
Section cross-reference(s): 28, 46  
TI Oxygen-containing nitrogen heterocycles and their application to detergents and cosmetics  
ST alkylhydroxyalkyloxazoline prepn surfactant thickener cosmetic detergent; hydroxymethylundecyloxazoline prepn surfactant thickener cosmetic detergent; oxazoline alkyl hydroxyalkyl prepn surfactant thickener  
IT Surfactants  
(amphoteric; preparation of O-containing N heterocycles as surfactants with  
goof thickening effect and detergents and cosmetics containing them)  
IT Surfactants  
(anionic; preparation of O-containing N heterocycles as surfactants with  
goof thickening effect and detergents and cosmetics containing them)  
IT Surfactants  
(cationic; preparation of O-containing N heterocycles as surfactants with  
goof thickening effect and detergents and cosmetics containing them)  
IT Surfactants  
(nonionic; preparation of O-containing N heterocycles as surfactants with  
goof thickening effect and detergents and cosmetics containing them)  
IT Cosmetics  
Detergents  
Thickening agents  
(preparation of O-containing N heterocycles as surfactants with goof  
thickening effect and detergents and cosmetics containing them)

IT Coconut oil  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of O-containing N heterocycles as surfactants with goof thickening effect and detergents and cosmetics containing them)

IT Surfactants  
 (semipolar; preparation of O-containing N heterocycles as surfactants with goof thickening effect and detergents and cosmetics containing them)

IT Surfactants  
 (zwitterionic; preparation of O-containing N heterocycles as surfactants with goof thickening effect and detergents and cosmetics containing them)

IT 2581-46-6P 24448-07-5P 57101-67-4DP, 2-coco alkyl  
 derivs. 329352-65-0P  
 RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of O-containing N heterocycles as surfactants with goof thickening effect and detergents and cosmetics containing them)

IT 111-82-0, Methyl laurate 115-69-5, 2-Amino-2-methyl-1,3-propanediol 115-70-8, 2-Amino-2-ethyl-1,3-propanediol 143-07-7, Lauric acid, reactions 534-03-2, Serinol  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of O-containing N heterocycles as surfactants with goof thickening effect and detergents and cosmetics containing them)

L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
 IC C10M001-10; C10M001-54; C10M005-28  
 INCL 252049600  
 CC 51-7 (Fossil Fuels, Derivatives, and Related Products)  
 Section cross-reference(s): 27

TI Solubilized borates of bis-oxazoline and lubricant compositions  
 ST oxazoline borate lubricant antiwear antioxidant  
 IT Lubricating oil additives  
 (antioxidants-antiwear, alkylenebis[bis(hydroxymethyl)oxazoline reaction products with boric acid and substituted phenols as])

IT 88-26-6D, reaction products with alkylenebis[bis(hydroxymethyl)oxazoline] and boric acid 128-37-0D, reaction products with alkylenebis[bis(hydroxymethyl)oxazoline] and boric acid 10043-35-3D, reaction products with alkylenebis[bis(hydroxymethyl)oxazoline] and substituted phenols 72263-15-1D, reaction products with boric acid and substituted phenols  
 RL: USES (Uses)  
 (lubricating oil antioxidant and antiwear additives)

L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN  
 IC ICM H01L021-00  
 INCL 438692000  
 CC 76-3 (Electric Phenomena)  
 Section cross-reference(s): 66

TI Chemical mechanical polishing composition including an inhibitor for tungsten etching  
 ST etching inhibitor chem mech polishing tungsten  
 IT Siloxanes (nonpolymeric)  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (3-Aminopropyl, etching inhibitor; chemical mech. polishing composition including inhibitor of tungsten etching)

IT Oxides (inorganic), uses  
 RL: TEM (Technical or engineered material use); USES (Uses)

(abrasive; chemical mech. polishing composition including inhibitor of tungsten etching)

IT Stabilizing agents  
(acids; chemical mech. polishing composition including inhibitor of tungsten etching)

IT Catalysts  
Oxidizing agents  
Slurries  
(chemical mech. polishing composition including inhibitor of tungsten etching)

IT Peroxides, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(chemical mech. polishing composition including inhibitor of tungsten etching)

IT Polishing  
(chemical-mech.; chemical mech. polishing composition including inhibitor of tungsten etching)

IT Amines, uses  
Amino acids, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(etching inhibitor; chemical mech. polishing composition including inhibitor of tungsten etching)

IT Quaternary ammonium compounds, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(tetraalkyl, etching inhibitor; chemical mech. polishing composition including inhibitor of tungsten etching)

IT Quaternary ammonium compounds, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(tri-C8-10-alkylmethyl, chlorides, Aliquat 336, etching inhibitor; chemical mech. polishing composition including inhibitor of tungsten etching)

IT 1306-38-3, Ceria, uses 1310-53-8, Germania, uses 1314-23-4, Zirconia, uses 1344-28-1, Alumina, uses 13463-67-7, Titania, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(abrasive; chemical mech. polishing composition including inhibitor of tungsten etching)

IT 10421-48-4, Ferric nitrate  
RL: CAT (Catalyst use); USES (Uses)  
(catalyst; chemical mech. polishing composition including inhibitor of tungsten etching)

IT 7439-89-6D, Iron, compds., uses  
RL: CAT (Catalyst use); USES (Uses)  
(chemical mech. polishing composition including inhibitor of tungsten etching)

IT 7440-33-7, Tungsten, processes  
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)  
(chemical mech. polishing composition including inhibitor of tungsten etching)

IT 124-22-1, Dodecylamine 919-30-2, Silquest A1106 55965-84-9  
RL: MOA (Modifier or additive use); USES (Uses)  
(chemical mech. polishing composition including inhibitor of tungsten etching)

IT 51-17-2, Benzimidazole 52-90-4, Cysteine, uses 56-40-6, Glycine, uses 56-45-1, Serine, uses 56-85-9, Glutamine, uses 56-86-0, Glutamic acid, uses 56-87-1, Lysine, uses 60-18-4, Tyrosine, uses 63-91-2, Phenylalanine, uses 67-03-8, Thiamine hydrochloride 67-51-6,

3,5-Dimethylpyrazole 70-18-8D, Glutathione, reduced 71-00-1, Histidine, uses 75-59-2, Tetramethylammonium hydroxide 91-19-0, Quinoxaline 95-14-7, 1H-Benzotriazole 97-77-8, Tetraethylthiuram disulfide 110-02-1, Thiophene 110-86-1, Pyridine, uses 288-13-1, Pyrazole 289-80-5, Pyridazine 290-37-9, Pyrazine 505-86-2, Cetyltrimethylammonium hydroxide 583-39-1, 2-Mercaptobenzimidazole 1033-90-5 1072-71-5, 2,5-Dimercapto-1,3,4-thiadiazole 1072-83-9, 2-Acetylpyrrole 1892-30-4, Dithiopropionic acid 2052-49-5, Tetrabutylammonium hydroxide 5401-94-5, 5-Nitroindazole 13925-07-0, 2-Ethyl-3,5-dimethylpyrazine 14667-55-1, 2,3,5-Trimethylpyrazine 51200-87-4, Nuosept 101 83037-33-6, 3-Aminopropylsilanol 220107-67-5, Monaquat ISES 220440-07-3, Mercaptopyridine N-oxide  
 RL: MOA (Modifier or additive use); USES (Uses)

(etching inhibitor; chemical mech. polishing composition including inhibitor of tungsten etching)

IT 30093-99-3, 4,4-Dimethylloxazoline 101546-05-8, 2-Heptadecenyl-4-ethyl-2-oxazoline-4-methanol  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (inhibitor; chemical mech. polishing composition including inhibitor of tungsten etching)

IT 7631-86-9, Silica, uses 7722-84-1, Hydrogen peroxide, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (slurry component; chemical mech. polishing composition including inhibitor of tungsten etching)

IT 77-92-9, uses 88-99-3, Phthalic acid, uses 100-47-0, Benzonitrile, uses 124-04-9, Hexanedioic acid, uses 141-82-2, Propanedioic acid, uses 144-62-7, Ethanedioic acid, uses 7664-38-2, Phosphoric acid, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (stabilizer; chemical mech. polishing composition including inhibitor of tungsten etching)

IT 7440-32-6, Titanium, processes 25583-20-4, Titanium mononitride  
 RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
 (substrate; chemical mech. polishing composition including inhibitor of tungsten etching)

L8 133 ANSWERS HCAPLUS COPYRIGHT 2008 ACS on STN

IC C09K003-00

INCL 106014500

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 43

TI Chromogenic hot melt coating compositions

ST pressure sensitive copying paper; hot melt coating copying paper; wax coating copying paper; microcapsule coating copying paper

IT Montan wax

RL: USES (Uses)  
 (oxidized, coatings, containing chromogenic microcapsules, for pressure-sensitive copying paper)

IT Castor oil

RL: USES (Uses)  
 (sulfated, emulsifier, for hot-melt wax coatings containing chromogenic microcapsules, for pressure-sensitive copying paper)

IT Emulsifying agents

(anionic, for hot-melt wax coatings containing chromogenic microcapsules, for pressure-sensitive copying paper)

IT Paraffin waxes and Hydrocarbon waxes, uses and miscellaneous

RL: TEM (Technical or engineered material use); USES (Uses)  
 (microcryst., coatings, containing chromogenic microcapsules, for pressure-sensitive copying paper)

IT Copying paper

(pressure-sensitive, hot-melt wax coatings containing chromogenic microcapsules for)

IT 14466-50-3 24448-04-2  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (coatings, containing chromogenic microcapsules, for pressure-sensitive copying paper)

IT 151-21-3, uses and miscellaneous 9011-16-9 9084-06-4 37199-81-8  
 66331-18-8  
 RL: USES (Uses)  
 (emulsifier, for hot-melt wax coatings containing chromogenic microcapsules, for pressure-sensitive copying paper)

IT 9004-64-2  
 RL: USES (Uses)  
 (microcapsules, containing chromogenic materials, for pressure-sensitive copying paper)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> d his

(FILE 'HOME' ENTERED AT 09:18:00 ON 19 MAR 2008)

FILE 'REGISTRY' ENTERED AT 09:18:12 ON 19 MAR 2008

L1 STRUCTURE UPLOADED  
 L2 233 S L1 FULL  
 L3 8 S L1

FILE 'HCAPLUS' ENTERED AT 09:20:58 ON 19 MAR 2008

L4 148 S L2  
 L5 2 S L2/THU

FILE 'REGISTRY' ENTERED AT 09:25:02 ON 19 MAR 2008

L6 0 S L4 AND PY<2004

FILE 'HCAPLUS' ENTERED AT 09:26:40 ON 19 MAR 2008

L7 140 S L4 AND PY<2004  
 L8 133 S L4 AND PY<2003

=> d l7

L7 ANSWER 1 OF 140 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:711041 HCAPLUS

DN 141:191181

TI Process for production of polyoxazolines from 2-alkyl-4,4-bis(hydroxymethyl)-2-oxazolines

IN Srinivasan, Krishnaswami; Gadkari, Rajendra; Iyer, Rama; Thakker, Krishan

PA ICI India Limited, India

SO Indian, 13 pp.

CODEN: INXXAP

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	IN 176225	A1	19960316	IN 1991-CA137	19910213 <--
PRAI	IN 1991-CA137		19910213		
OS	MARPAT 141:191181				

=> d l8 ibib abs

L8 ANSWER 1 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:711041 HCAPLUS  
 DOCUMENT NUMBER: 141:191181  
 TITLE: Process for production of polyoxazolines from  
 2-alkyl-4,4-bis(hydroxymethyl)-2-oxazolines  
 Srinivasan, Krishnaswami; Gadkari, Rajendra; Iyer,  
 Rama; Thakker, Krishan  
 INVENTOR(S): ICI India Limited, India  
 PATENT ASSIGNEE(S): Indian, 13 pp.  
 SOURCE: CODEN: INXXAP  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 176225	A1	19960316	IN 1991-CA137	19910213 <--
PRIORITY APPLN. INFO.: OTHER SOURCE(S): MARPAT 141:191181			IN 1991-CA137	19910213

AB A process for the production of novel polyoxazolines containing (un)saturated  
 C7-17 alkyl groups and having 1-10 repeating units from 2-alkyl-4,4-  
 bis(hydroxymethyl)-2-oxazolines is provided. For example, the process  
 comprised reacting 2-undecyl-4,4-bis(hydroxymethyl)-2-oxazoline (I) with  
 boron trifluoride etherate (II) as a nonaq. acid catalyst at 170°  
 and at a molar ratio of I to II (5-20):1 under N2 atmospheric for 2 h.

=> d 18 ibib abs 1-133

L8 ANSWER 1 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:711041 HCAPLUS  
 DOCUMENT NUMBER: 141:191181  
 TITLE: Process for production of polyoxazolines from  
 2-alkyl-4,4-bis(hydroxymethyl)-2-oxazolines  
 Srinivasan, Krishnaswami; Gadkari, Rajendra; Iyer,  
 Rama; Thakker, Krishan  
 INVENTOR(S): ICI India Limited, India  
 PATENT ASSIGNEE(S): Indian, 13 pp.  
 SOURCE: CODEN: INXXAP  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 176225	A1	19960316	IN 1991-CA137	19910213 <--
PRIORITY APPLN. INFO.: OTHER SOURCE(S): MARPAT 141:191181			IN 1991-CA137	19910213

AB A process for the production of novel polyoxazolines containing (un)saturated  
 C7-17 alkyl groups and having 1-10 repeating units from 2-alkyl-4,4-  
 bis(hydroxymethyl)-2-oxazolines is provided. For example, the process  
 comprised reacting 2-undecyl-4,4-bis(hydroxymethyl)-2-oxazoline (I) with  
 boron trifluoride etherate (II) as a nonaq. acid catalyst at 170°  
 and at a molar ratio of I to II (5-20):1 under N2 atmospheric for 2 h.

L8 ANSWER 2 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:278981 HCAPLUS  
 DOCUMENT NUMBER: 139:227479  
 TITLE: Chemical composition of the sponge Chondrosia



reniformis from the Canary Islands

AUTHOR(S): Nechev, Jordan; Christie, William W.; Robaina, Rafael; de Diego, Fernando M.; Ivanova, Albena; Popov, Simeon; Stefanov, Kamen

CORPORATE SOURCE: Inst. of Org. Chemistry with Centre of Phytochemistry, Bulg. Acad. Sci., Sofia, 1113, Bulg.

SOURCE: Hydrobiologia (2002), 489, 91-98  
CODEN: HYDRB8; ISSN: 0018-8158

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The fatty acid composition of the lipids from *Chondrosia reniformis* (Nardo, 1847) was investigated and 57 acids were identified. One of them is new for nature and its structure was elucidated by GC/mass-spectrometry. This acid was identified as 8,10-dimethyl-16:0. The sterol composition was relatively simple and only 12 sterols were present. In the volatile fraction, 21 compds. were identified, mainly fatty acids, their esters and hydrocarbons, while in the n-butanol fraction we found mainly free fatty acids and free amino acids, together with significant amts. of sterols which probably are included in some polar complexes.

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:12229 HCAPLUS

DOCUMENT NUMBER: 138:234956

TITLE: Lipid composition of the sponge *Verongia aerophoba* from the Canary Islands

AUTHOR(S): Nechev, Jordan; Christie, William W.; Robaina, Rafael; de Diego, Fernando; Popov, Simeon; Stefanov, Kamen

CORPORATE SOURCE: Institute of Organic Chemistry with Centre of Phytochemistry, Bulgarian Academy of Science, Sofia, 1113, Bulg.

SOURCE: European Journal of Lipid Science and Technology (2002), 104(12), 800-807  
CODEN: EJLTFM; ISSN: 1438-7697

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The fatty acid composition of the lipids from the sponge *Verongia aerophoba* was investigated and 60 acids were identified. Two of them were new and their structures were elucidated by gas chromatog.-mass spectrometry. These acids were identified as 20-methylhexacosanoic and A5,9,22-nonacosatrienoic. Only 13 sterols were present, and aplysterol predominated. In the volatile fraction 13 compds. were identified, mainly fatty acids, their esters and hydrocarbons, while in the n-butanol fraction we found mainly free fatty acids and free amino acids.

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:11748 HCAPLUS

DOCUMENT NUMBER: 138:224578

TITLE: Evaluation of three oxazolines as corrosion inhibitors by electrochemical techniques

AUTHOR(S): Rodriguez, Saddys; Abreu, Asela; Cepero, Ana

CORPORATE SOURCE: Dpto. Corrosion, Centro Nacional de Investigaciones Cientificas, Havana, Cuba

SOURCE: Revista CENIC, Ciencias Quimicas (2002), 33(2), 65-70  
CODEN: RCCOER; ISSN: 1015-8553

PUBLISHER: Centro Nacional de Investigaciones Cientificas

DOCUMENT TYPE: Journal  
LANGUAGE: Spanish

AB The possible inhibitive effect of three compds. of the 2-oxazoline family, which were obtained by nonconventional chemical synthesis using microwaves, on corrosion of steel AISI 1020 in atmospheric conditions was assessed using modern electrochem. techniques (electrochem. impedance, polarization, polarization resistance, and potential vs. time). The compds. studied were: 2-benzyl-4,4-dihydroxymethyl-2-oxazoline (I), 2-heptadecenyl-4,4-bis(stearoyloxymethyl)-2-oxazoline (II), and 2-heptadecenyl-4,4-dihydroxymethyl-2-oxazoline (III). The oxazolines were dissolved in basic oil at 70°C at different concns. The results showed the ability of that type of oxazoline compds. to adsorb on the metal surface. The oxazoline I dissolved in basic oil at 0.2% (weight/weight) did not exhibit corrosion inhibitive characteristics. In the case of the oxazoline II at 2% (weight/weight), a delay of atmospheric corrosion processes was observed, whereas for the oxazoline III at concns. higher than 0.75% (weight/weight), a decreasing steel corrosion rate took place. In the latter case, the action mechanism corresponded to that of a passivator.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:125500 HCAPLUS

DOCUMENT NUMBER: 136:134500

TITLE: Method for preparation of pentadecanoic acid derivatives

INVENTOR(S): Cho, Jeong Hyuk; Oh, Chang Hyun; Lee, Ki Su; Jin, Kyung Yong; Lee, Myung Cheol; Jeong, Jun Ki; Lee, Dong Su; Jeong, Jae Min

PATENT ASSIGNEE(S): Korea Institute of Science and Technology, S. Korea

SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given

CODEN: KRXXA7

DOCUMENT TYPE: Patent

LANGUAGE: Korean

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

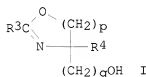
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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KR 2000020032	A	20000415	KR 1998-38442	19980917 <--
PRIORITY APPLN. INFO.:			KR 1998-38442	19980917

AB Title derivs., useful as radioactive pharmaceuticals, are prepared which can extend a residual time in heart, and minimize radiation disorders. 1,12-Dodecanediol is brominated by bromic acid to give 12-bromododecan-1-ol, and protected by tetrahydropyran to give 2-(12-bromododecan-1-yloxy)tetrahydropyran. Obtained dodecane, 2-ethyl-4,4-dimethyl-2-oxazoline and butyllithium are reacted to give 2-(4,4-dimethyl-2-oxazolin-2-yl)-14-(tetrahydro-2-pyranyloxy)-tetradecane which is esterified with sulfuric acid to give Et 2-methyl-14-hydroxytetradecanoate. Obtained tetradecanoate is protected to give Et 2-methyl-14-(tert-butylidimethylsilyloxy)tetradecanoate, followed by reduction with lithium aluminum hydride to give 2-methyl-14-(tert-butylidimethylsilyloxy)tetradecan-1-ol, tosylated by tosyl chloride, and underwent substitution reaction with sodium cyanide to give 3-methyl-15-(tert-butylidimethylsilyloxy)pentadecane-1-nitrile. Obtained nitrile is treated with 1 N hydrochloric acid, hydrolyzed and mesylated to give 15-(methanesulfonyloxy)-3-methylpentadecanoic acid. The pentadecanoic acid is brominated, followed by reaction with thiourea and NaOH to give 15-mercapto-3-methyl-pentadecanoic acid.

L8 ANSWER 6 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:372294 HCAPLUS  
 DOCUMENT NUMBER: 134:371615  
 TITLE: Thickeners containing alkanolamides and nitrogen heterocycles and detergent compositions containing the thickeners  
 INVENTOR(S): Murayama, Tomohiro  
 PATENT ASSIGNEE(S): Kawaken Fine Chemicals Co., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001139986	A	20010522	JP 1999-322788	19991112 <--
PRIORITY APPLN. INFO.: OTHER SOURCE(S): GI	MARPAT	134:371615	JP 1999-322788	19991112

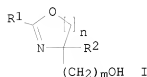


AB The thickeners, which have good miscibility and low-temperature stability, contain (A) R<sup>1</sup>CONHCR<sup>2</sup>[(CH<sub>2</sub>)<sub>m</sub>OH][(CH<sub>2</sub>)<sub>n</sub>OH] (R<sup>1</sup> = C<sub>5</sub>-21 linear or branched alkyl or alkenyl which may have ≥1 OH; R<sup>2</sup> = H, C<sub>1</sub>-5 alkyl; m, n = 1-5) and (B) N- and O-containing heterocycles I (R<sup>3</sup> = C<sub>5</sub>-21 linear or branched alkyl or alkenyl which may have ≥1 OH; R<sup>4</sup> = H, C<sub>1</sub>-5 alkyl; p, q = 1-5). The detergent comps. contain ≥1 surfactant selected from nonionic surfactants, anionic surfactants, cationic surfactants, amphoteric surfactants, semipolar surfactants, and zwitterionic surfactants and the above thickeners at 0.1-50%. A hand cleanser was prepared from lauric acid 5.5, lauramidopropylamine oxide 3.0, polyoxyethylene lauryl ether acetate (30% aqueous solution) 3.0 benzalkonium chloride (50% aqueous solution) 1.0m benzethonium chloride (50% aqueous solution) 0.5, N-[bis(hydroxymethyl)propyl]lauramide 1.0, 2-undecyl-4-ethyl-4-hydroxymethyl-4-oxazoline 1.0, coco fatty acid imidazolinium betaine 9.5, N(CH<sub>2</sub>CH<sub>2</sub>OH)<sub>3</sub>, glycerin 3%, and H<sub>2</sub>O balance. The cleanser was stored at -5° for 3 days to show no change in the appearance.

L8 ANSWER 7 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2001:174086 HCAPLUS  
 DOCUMENT NUMBER: 134:227110  
 TITLE: Oxygen-containing nitrogen heterocycles and their application to detergents and cosmetics  
 INVENTOR(S): Murayama, Tomohiro  
 PATENT ASSIGNEE(S): Kawaken Fine Chemicals Co., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001064267	A	20010313	JP 1999-240410	19990826 <--
PRIORITY APPLN. INFO.:			JP 1999-240410	19990826
OTHER SOURCE(S):	MARPAT	134:227110		

GI



AB The compds. I (R<sub>1</sub> = C<sub>5</sub>-21 linear or branched alkyl or alkenyl which may be substituted with ≥1 OH; R<sub>2</sub> = H, C<sub>1</sub>-5 alkyl; m, n = 1-5) are prepared. The detergents contain I and ≥1 selected from anionic surfactants, nonionic surfactants, cationic surfactants, amphoteric surfactants, zwitterionic surfactants, and semipolar surfactants. The cosmetics contain I and ≥1 cosmetic components. I are liquid at ordinary temperature and show high thickening action. An aqueous solution of 2-coco alkyl-4-ethyl-4-hydroxymethyl-2-oxazoline (preparation given, adjusted to pH 7.0 with citric acid and NaOH) had viscosity 13,160 mPa.s. A body shampoo containing 2-undecyl-4-methyl-4-hydroxymethyl-2-oxazoline was stored at -5° for 3 days to show no appearance.

L8 ANSWER 8 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:752121 HCAPLUS

DOCUMENT NUMBER: 133:316409

TITLE: Chemical mechanical polishing composition including an inhibitor for tungsten etching

INVENTOR(S): Grumline, Steven K.; Streinz, Christopher C.; Hoglund, Eric W. G.

PATENT ASSIGNEE(S): Cabot Corporation, USA

SOURCE: U.S., 9 pp., Cont.-in-part of U.S. 6,083,419.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6136711	A	20001024	US 1998-86659	19980529 <--
US 6083419	A	20000704	US 1997-901803	19970728 <--
CN 1272221	A	20011101	CN 1998-809580	19980727 <--
IL 134213	A	20051218	IL 1998-134213	19980727
CN 1966594	A	20070523	CN 2006-10077360	19980727
TW 580514	B	20040321	TW 1998-87112310	19980728
AT 288948	T	20050215	AT 1998-305999	19980728
US 6592776	B1	20030715	US 2000-609882	20000705
US 2003203635	A1	20031030	US 2003-419659	20030421
US 6767476	B2	20040727		
PRIORITY APPLN. INFO.:			US 1997-901803	A2 19970728
			US 1998-86659	A 19980529
			CN 1998-809580	A3 19980727
			WO 1998-US15572	W 19980727
			US 2000-609882	A3 20000705

AB A chemical mech. polishing composition comprising a composition capable of etching W

and at least one inhibitor of W etching and methods for using the composition to polish W containing substrates.

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:384809 HCAPLUS

DOCUMENT NUMBER: 133:61826

TITLE: Evaluation of 2-oxazoline as corrosion inhibitor  
AUTHOR(S): Rodriguez, Saddys; Abreu y, Asela; Milian, Virgen  
CORPORATE SOURCE: Corrosion, Centro Nacional de Investigaciones

Cientificas, Ciudad de La Habana, Cuba  
SOURCE: Revista CENIC, Ciencias Quimicas (1999),  
30(3), 178-181  
CODEN: RCCQER; ISSN: 1015-8553

PUBLISHER: Centro Nacional de Investigaciones Cientificas

DOCUMENT TYPE: Journal

LANGUAGE: Spanish

AB An study on effectiveness as corrosion inhibitor in atmospheric conditions of the

2-heptadecenyl-4,4-bis(hidroxiomethyl)-2-oxazoline obtained by means of non-conventional chemical synthesis, using modern techniques of evaluation of inhibitors, which have not been reported for this kind of compds., was carried out. The method of non-conventional synthesis consisted in the employment of non-traditional energy sources, such as microwaves. This method has several advantages compared to the conventional ones such as: lower times for synthesis, no utilization of solvent, the obtaining of high yield of reaction and the last product free of sludge. For evaluation the 2-heptadecenyl-4,4-bis(hidroxiomethyl)-2-oxazoline, was dissolved to several concns. (0.25; 0.5; 0.75; 1.0; 2.0; 5.0 %), in basic oil of viscosity 20 s.c.m-1 to 70 °C. These concns. were taken keeping in mind that this substance, to 100 ppm in mineral oil, offers high effectiveness. AISI-1020 steel and electrolytic iron 99.99% pure were used. Several test methods were used: accelerated (neutral salt spray chamber, SO2 atmosphere, salinity immersion, heat-humidity chamber) and electrochem. (polarization curves and polarization resistance). The results defined the 2-heptadecenyl-4,4-bis(hidroxiomethyl)-2-oxazoline obtained by means of no conventional chemical synthesis, as corrosion inhibitor of iron and its alloys dissolved in basic oil. An adjustment of the better concns. for their employment as corrosion inhibitor was also made.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:138180 HCAPLUS

DOCUMENT NUMBER: 132:236728

TITLE: Mass spectrometry of the 4,4-dimethyloxazoline  
derivatives of isomeric octadecenoates (monoenes)  
AUTHOR(S): Christie, W. W.; Robertson, G. W.; McRoberts, W. C.;  
Hamilton, J. T. G.

CORPORATE SOURCE: Scottish Crop Research Institute, Dundee, DD2 2DA, UK  
SOURCE: European Journal of Lipid Science and Technology ( 2000), 102(1), 23-29  
CODEN: EJLTFM; ISSN: 1438-7697

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Although 4,4-dimethyloxazoline (DMOX) derivs. of fatty acids were widely used for structural anal. of fatty acids by mass spectrometry, spectra of relatively few authentic stds. were published. Confusion can result when double bonds are located near either end of the mol., and errors were

promulgated in the literature. Mass spectra of DMOX derivs. of the complete series of isomeric octadecenoates are described. Even when spectra are not easily interpreted mechanistically in terms of the double bond location, they usually give distinctive fingerprints.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 2000:95715 HCAPLUS

DOCUMENT NUMBER: 132:308148

TITLE: Mechanisms for ion formation during the electron impact-mass spectrometry of picolinyl ester and 4,4-dimethyloxazoline derivatives of fatty acids

AUTHOR(S): Hamilton, J. T. G.; Christie, W. W.

CORPORATE SOURCE: Food Science Division, Newforge Lane, Department of Agriculture for Northern Ireland, Belfast, UK

SOURCE: Chemistry and Physics of Lipids (2000), 105(1), 93-104

CODEN: CPLIA4; ISSN: 0009-3084

PUBLISHER: Elsevier Science Ireland Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Mass spectral studies have been conducted with isotopically stable labeled and fluorinated picolinyl esters and 4,4-dimethyloxazoline (DMOX) derivs. of fatty acids in order to establish mechanisms of ion formation. Reciprocal hydrogen transfer is shown to be involved in the formation of the ion at m/z 126 with dimethyloxazoline derivs. and for the ion at m/z 164 with picolinyl esters. Inclusion of a fluorine atom alpha to the carboxyl of a fatty acid has been demonstrated to enhance rearrangements for expulsion of internal chain fragments with both Me ester and dimethyloxazoline derivs. When two fluorine atoms are inserted into the alpha position a similar rearrangement has been shown to occur with picolinyl esters, although not nearly to the same extent as that observed with either of the other derivs. Mechanisms for such rearrangements are proposed and discussed. With fatty acid dimethyloxazoline derivs. the M-15 ion arises solely from the loss of a Me radical from the ring and the M-43 ion has at least three different mechanisms of formation. Such rearrangements make it difficult to establish the identity of the terminal moiety of the alkyl chain. In mass spectrometry terms the picolinyl ester would seem to be the superior derivative for structural characterization of fatty acids.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 12 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 1999:28272 HCAPLUS

DOCUMENT NUMBER: 130:211012

TITLE: Mass spectrometry of fluorinated fatty acids in the seed oil of Dichapetalum toxicarium

AUTHOR(S): Christie, W. W.; Hamilton, J. T. G.; Harper, D. B.

CORPORATE SOURCE: Scottish Crop Research Institute, Dundee, DD2 5DA, UK

SOURCE: Chemistry and Physics of Lipids (1998), 97(1), 41-47

CODEN: CPLIA4; ISSN: 0009-3084

PUBLISHER: Elsevier Science Ireland Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The  $\omega$ -fluoro fatty acids in the seed oil of Dichapetalum toxicarium have been characterized by gas chromatog.-mass spectrometry of the picolinyl ester and 4,4-dimethyloxazoline derivs. The picolinyl esters gave mass spectra that permitted determination of the positions of double bonds,

and confirmed that the fluorine atom was on the terminal carbon in each instance. In contrast, it appeared that a rearrangement of the mol. occurred with the dimethylloxazoline derivs. which made it difficult not only to confirm the presence of the fluorine atom but also to establish its position. The mechanism of this rearrangement is discussed. It may be a characteristic of dimethylloxazoline derivs. of all  $\omega$ -substituted fatty acids, not simply those containing fluorine atoms. By means of these techniques, a number of fatty acids were characterized in the oil, several for the first time, i.e.  $\omega$ -Fluoro-7-16:1, 9-16:1, 18:0, 9-18:1, 9,12-18:2, 20:0, 9-20:1 and 11-20:1, in addition to related non-fluorinated components.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 13 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:742197 HCAPLUS

DOCUMENT NUMBER: 130:14957

TITLE: High-solids thermosetting coatings containing rheology control agents

INVENTOR(S): Banerjee, Krishna G.; Karp, Edmund J.; Lange, Richard M.; Steckel, Thomas F.

PATENT ASSIGNEE(S): Lubrizol Corporation, USA

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 877060	A2	19981111	EP 1998-303646	19980508 <--
EP 877060	A3	19990107		
EP 877060	B1	20031022		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

US 6008278	A	19991228	US 1997-854218	19970509 <--
CA 2236618	A1	19981109	CA 1998-2236618	19980504 <--

PRIORITY APPLN. INFO.: US 1997-854218 A 19970509

OTHER SOURCE(S): MARPAT 130:14957

AB A coating composition comprises (A) a film-forming resin, (B) a rheol. control agent, and (C) a pigment, where B is the reaction product of a nonalkoxylated hydroxy amine or hydroxy imine and an acylating agent. Thus, 2.27 mol C18-24 substituted succinic anhydride and 2.27 mol HN(CH<sub>2</sub>CH<sub>2</sub>OH)<sub>2</sub> were heated at 146-152° until the acid number was <20 to give a rheol. control agent. A grind phase comprising Cargill 57-5776 (polyester resin) 16.5, the agent 0.5, TiO<sub>2</sub> 35.9, and Byk 300 0.1 part and a letdown phase comprising Cargill 57-5776 23.1, Resimene 747 11.2, Byk 451 0.9, and Me isoamyl ketone 11.9 parts were combined and applied as a 1.73-mil coating and showed no sagging in a Baker sag test.

L8 ANSWER 14 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:703417 HCAPLUS

DOCUMENT NUMBER: 129:317933

TITLE: Low-residue macroemulsion cleaner with perchloroethylene

INVENTOR(S): Mainz, Eric L.; Nyberg, Janice M.

PATENT ASSIGNEE(S): Vulcan Materials Co., USA

SOURCE: U.S., 6 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

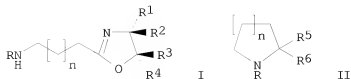
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 5827809	A	19981027	US 1996-730363	19961015 <--
PRIORITY APPLN. INFO.:				US 1996-730363	19961015
AB	A stable oil-in-water macroemulsion cleaner comprises perchloroethylene (I), water, ethanol and/or Et acetate, and a nonionic surfactant, and the cleaner has low toxicity, rapid evaporation rate and leaves low residue after use. The cleaner removes greasy and oily soils from soiled surfaces, and is nonflammable as an aerosol spray with appropriate propellant formulations. Thus, a cleaner contained I 20.01, water 12.16, acetone 8.00, Tween 80 0.37, and Surfynol 61 0.02 g.				
REFERENCE COUNT:	40	THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT			

L8 ANSWER 15 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN  
ACCESSION NUMBER: 1998:466901 HCAPLUS  
DOCUMENT NUMBER: 129:213715  
TITLE: Mass spectrometry of fatty acids with methylene-interrupted ene-yne systems  
AUTHOR(S): Christie, William W.  
CORPORATE SOURCE: Scottish Crop Research Institute, Invergowrie, Dundee, DD2 5DA, UK  
SOURCE: Chemistry and Physics of Lipids (1998), 94(1), 35-41  
CODEN: CPLIA4; ISSN: 0009-3084  
PUBLISHER: Elsevier Science Ireland Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB When crepenynic acid and octadec-14-yn-17-enoic acid were converted to 4,4-dimethyloxazoline (DMOX) derivs. by the usual procedure, considerable isomerization occurred. The former was converted in part to 7-(5-pentyl-cyclohexadienyl)-heptadecanoate, as was confirmed by mass spectrometry, including preparation of a Diels-Alder adduct with 4-methyl-1,2,4-triazoline-3,5-dione. A mild procedure for preparation of dimethyloxazoline derivs. was therefore developed that did not cause such artifact formation. The mass spectra of the dimethyloxazoline and picolinyl ester derivs. of the two acids are described.  
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 16 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN  
ACCESSION NUMBER: 1996:469369 HCAPLUS  
DOCUMENT NUMBER: 125:167850  
TITLE: Chiral 2-( $\omega$ -aminoalkyl)oxazolines by ring transformation of lactam derivatives  
AUTHOR(S): Rottmann, Antje; Liebscher, Juergen  
CORPORATE SOURCE: Inst. Chemie, Humboldt Univ., Berlin, D-10115, Germany  
SOURCE: Journal fuer Praktische Chemie/Chemiker-Zeitung (1996), 338(5), 397-402  
CODEN: JPCCEM; ISSN: 0941-1216  
PUBLISHER: Barth  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



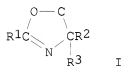


AB 2-( $\omega$ -Aminoalkyl)oxazolines I (R = H, Me; R1 = H, Me, Et; R2 = H, Me, MeOCH<sub>2</sub>; R3, R4 = H, Ph; n = 1-3, 9) were prepared in enantiomerically pure form by ring transformation of lactim ethers II (RR5 = bond; R6 = OMe) or lactam acetals II (R = Me; R5, R6 = OEt) with chiral 2-amino alcs. Hydroxyethylmimnolactams, lactamiminoalkyloxazolines, or  $\omega$ -aminoalkanamides were formed as byproducts by condensation without ring transformation, by further reaction with lactim ether, or by hydrolysis, resp.

L8 ANSWER 17 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1996:342177 HCAPLUS  
 DOCUMENT NUMBER: 125:37861  
 TITLE: Refrigerator oil compositions  
 INVENTOR(S): Katabuchi, Tadashi; Aida, Takashi; Yagi, Junichi  
 PATENT ASSIGNEE(S): Idemitsu Kosan Co, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08073880	A	19960319	JP 1994-215693	19940909 <---
PRIORITY APPLN. INFO.:			JP 1994-215693	19940909
OTHER SOURCE(S):	MARPAT 125:37861			

GI



AB Refrigerator oil compns. containing H-containing Flon refrigerants with improved inhibition of formation of sludge and metal corrosion comprise a base oil of O-containing compds. having kinematic viscosity 1-50 cSt (at 100°) and oxazoline compds. I, where R1 = C3-18 straight or branched alkyl or alkenyl group, and R1 and R2 = H or C1-5 straight or branched alkyl groups.

L8 ANSWER 18 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1996:288176 HCAPLUS  
 DOCUMENT NUMBER: 124:336177  
 TITLE: Effect of Na-Acyl Chain Length on the Membrane-Modifying Properties of Synthetic Analogs of the Lipopeptaibol Trichogin GA IV

AUTHOR(S): Toniolo, C.; Crisma, M.; Formaggio, F.; Peggion, C.; Monaco, V.; Goulard, C.; Rebuffat, S.; Bodo, B.  
CORPORATE SOURCE: Department of Organic Chemistry, University of Padova, Padua, 35131, Italy  
SOURCE: Journal of the American Chemical Society (1996), 118(21), 4952-4958  
CODEN: JACSAT; ISSN: 0002-7863  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Trichogin GA IV, an 11-residue lipopeptaibol blocked at the N-terminus by an n-octanoyl group and at the C-terminus by a 1,2-amino alc. (L-leucinol), extracted from the fungus *Trichoderma longibrachiatum*, exhibits remarkable membrane-modifying properties. We have synthesized trichogin GA IV and several [L-Leu-OMe] analogs carrying at the N-terminus an acyl chain of variable length (C2-C8, C10, C12, C14, C16, C18). A succinylated head-to-head dimer was also prepared. A conformational anal., carried out by FTIR absorption, CD, and NMR, showed that the right-handed helical structure of the natural lipopeptaibol is essentially preserved in all its analogs. Permeability measurements revealed that at least six carbon atoms in the N $\alpha$ -blocking fatty acyl moiety are required for the onset of significant membrane-modifying properties. Also the head-to-head dimer is remarkably active. Possible models for the mechanism of membrane permeability of trichogin GA IV are discussed.

L8 ANSWER 19 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN  
ACCESSION NUMBER: 1996:279593 HCAPLUS  
DOCUMENT NUMBER: 124:337204  
TITLE: Synthesis of [14,14,14-2H3]12-hydroxytetradecanoic acid and [13,14-2H2]11-hydroxytetradecanoic acid useful as tracers to study a (11E)-desaturation reaction in *Spodoptera littoralis*  
AUTHOR(S): Navarro, Isabel; Fabrias, Gemma; Camps, Francisco  
CORPORATE SOURCE: CIS, CSIC, Barcelona, 08034, Spain  
SOURCE: Bioorganic & Medicinal Chemistry (1996), 4(3), 439-443  
CODEN: BMECEP; ISSN: 0968-0896  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The synthesis of deuterium labeled 11- and 12-hydroxytetradecanoic acids to study a (11E) desaturase in the moth *S. littoralis* is reported. [14,14,14-2H3]12-hydroxytetradecanoic acid was synthesized in 4 steps from 11-iodo-1-undecene in 49% overall yield. Deuterium was introduced by reaction of an epoxy ester with (CD3)2CuLi. The preparation of [13,14-2H2]11-hydroxytetradecanoic acid was carried out in 6 steps from 11-bromoundecanoic acid in 55% overall yield. In this case, label was introduced by deuteration of an homoallyl alc. with D2, using the Wilkinson catalyst. Incubation of pheromone glands with either of both acids did not lead to the formation of the labeled (11E)-tetradecenoic acid.

L8 ANSWER 20 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN  
ACCESSION NUMBER: 1994:582783 HCAPLUS  
DOCUMENT NUMBER: 121:182783  
TITLE: Corrosion inhibitor system for an intermediate heat transfer medium  
INVENTOR(S): Emerich, Dwight E.; Fix, Kathleen A.  
PATENT ASSIGNEE(S): Ashchem IP, USA  
SOURCE: Can. Pat. Appl., 13 pp.  
CODEN: CPXXEB  
DOCUMENT TYPE: Patent

LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2104519	A1	19940303	CA 1993-2104519	19930820 <--
CA 2104519	C	19980908		
US 5300247	A	19940405	US 1992-939056	19920902 <--

PRIORITY APPLN. INFO.: US 1992-939056 A 19920902

AB The improved corrosion inhibitor system includes an oxazoline for an intermediate heat transfer medium for an indirect cooling heat transfer assembly and is introduced in an amount of 0.01-5.0 weight%.

L8 ANSWER 21 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:269878 HCAPLUS  
DOCUMENT NUMBER: 120:269878  
TITLE: On the syntheses of branched saturated fatty acids  
Gronowitz, Salo; Klingstedt, Tomas; Svensson, Leif;  
Hansson, Ulf  
CORPORATE SOURCE: Chem. Cent., Univ. Lund, Lund, Swed.  
SOURCE: Lipids (1993), 28(10), 889-97  
CODEN: LPDSAP; ISSN: 0024-4201  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 120:269878

AB To investigate the relation between the structure of mono-branched saturated fatty acids and their phys. properties, a three-factor central composite design was constructed. Sixteen different fatty acids were prepared, generally from a few common starting materials. Thus alkylation and hydrolysis of oxazolines were used for the preparation of 2-butylhexanoic acid, 2-methyloctadecanoic acid, 2-hexadecyloctadecanoic acid and 2-pentyloctadecanoic acid. Some acids were prepared from thiophene derivs. followed by desulfurization with Raney-Nickel alloy under alkaline conditions. Thus, starting from 3-ethylthiophene, 4-ethyl-2-thiophenecarboxylic acid and 4-ethyl-2-methyl-5-thiophenecarboxylic acid were prepared, which upon desulfurization gave the desired 4-methylhexanoic acid. 3-Bromo-2-methylthiophene gave 3-ethyl-2-methyl-5-thiophenecarboxylic acid via 3-acetyl-2-methylthiophene and 3-ethyl-2-methylthiophene. Desulfurization gave 4-ethylhexanoic acid. Treating 2-acylthiophenes with Grignard reagents gave the appropriate olefins, whose metalation and reaction with carbon dioxide gave the corresponding 2-thiophenecarboxylic acids.. This method gave 6-propyldecanoic acid, 6-hexyldodecanoic acid, 6-methyldodecanoic acid and 6-pentylpentadecanoic acid. The remaining four acids were prepared from some of the branched acids described above through Kolbe reactions of diolic acids. Thus 16-methyloctadecanoic acid and 10-methyldodecanoic acid were obtained from 4-methylhexanoic acid, 16-ethyloctadecanoic acid from 4-ethylhexanoic acid and 9-pentyloctadecanoic acid from 6-pentylpentadecanoic acid.

L8 ANSWER 22 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:605268 HCAPLUS  
DOCUMENT NUMBER: 119:205268  
TITLE: Thermoplastic polyester elastomers containing oxazolines, their manufacture and use  
Plitzko, Klaus Dieter; McKee, Graham Edmund  
INVENTOR(S): BASF A.-G., Germany  
PATENT ASSIGNEE(S): Ger. Offen., 19 pp.  
SOURCE: CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	DE 4129980	A1	19930311	DE 1991-4129980	19910910 <--
PRIORITY APPLN. INFO.:				DE 1991-4129980	19910910
AB	Mixts. of a thermoplastic polyester elastomer, e.g., 1,4-butanediol-di-Me terephthalate-polytetramethylene glycol copolymer, and an oxazoline such as Alkaterge E, Alkaterge T, or 2,2'-m-phenylenebis(2-oxazoline) show good melt processability and are resistant to hydrolysis and thermal decomposition				

L8 ANSWER 23 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:559716 HCAPLUS

DOCUMENT NUMBER: 119:159716

TITLE: Preparation of branched fatty acid amides and their intermediates

INVENTOR(S): Nakagawa, Shoji; Ochiai, Tatsushi; Yahagi, Kazuyuki

PATENT ASSIGNEE(S): Kao Corp, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

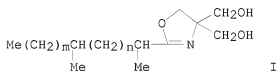
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 05086001	A	19930406	JP 1991-246165	19910925 <--
PRIORITY APPLN. INFO.:				JP 1991-246165	19910925
OTHER SOURCE(S):	CASREACT 119:159716; MARPAT 119:159716				
GI					



AB Branched fatty acid amides  $\text{Me}(\text{CH}_2)_m\text{CHMe}(\text{CH}_2)_n\text{CHMeCONHC}(\text{CH}_2\text{OH})_3$  (m, n = 0-19; m+n = 0-19), useful as emulsifiers, lubricants, and cosmetic bases for hair and skin preps., are prepared by (1) cyclocondensation of  $\text{H}_2\text{NC}(\text{CH}_2\text{OH})_3$  (I) with branched fatty acids  $\text{Me}(\text{CH}_2)_m\text{CHMe}(\text{CH}_2)_n\text{CHMeCO}_2\text{H}$  (m, n = same as above) and hydrolysis of the resulting oxazoline derivs. (II; m, n = same as above) or (2) hydrogenation of unsatd. fatty acid amides  $\text{Me}(\text{CH}_2)_m\text{CHMe}(\text{CH}_2)_n\text{C}(\text{CH}_2)\text{CONHC}(\text{CH}_2\text{OH})_3$ . Thus, cyclocondensation of  $\alpha$ -methylisostearic acid with II at 160° for 24 h with removal of H<sub>2</sub>O using a Dean-Stark trap gave 95% 2-(1-methylisooheptadecyl)-4,4-bis(hydroxymethyl)-2-oxazoline which was refluxed in aqueous EtOH at 90° for 30 h to give 91.8% N-tris(hydroxymethyl)methyl- $\alpha$ -methylisostearamide (III). III was a thermotropic liquid crystal at room temperature and compatible with H<sub>2</sub>O; a hair rinse composition containing 3.0% III gave flexibility and smoothness to hair and no oily feeling.

L8 ANSWER 24 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

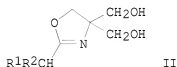
ACCESSION NUMBER: 1993:494977 HCAPLUS

DOCUMENT NUMBER: 119:94977

TITLE: Preparation of branched fatty acid amides and oxazolines as intermediates for the amides

INVENTOR(S): Nakagawa, Shoji; Ochiai, Tatsushi; Yahagi, Kazuyuki  
 PATENT ASSIGNEE(S): Kao Corp, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

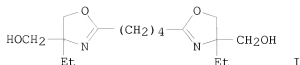
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05078294	A	19930330	JP 1991-239605	19910919 <--
PRIORITY APPLN. INFO.:			JP 1991-239605	19910919
OTHER SOURCE(S):		CASREACT 119:94977; MARPAT 119:94977		
GI				



AB R1R2CHCONHC(CH<sub>2</sub>OH)<sub>3</sub> (R<sub>1</sub>, R<sub>2</sub> = C<sub>2</sub>-24 linear alkyl; the total number of C of R<sub>1</sub> and R<sub>2</sub> = 4-26), useful as bases, emulsifiers, and lubricating substances for cosmetic hair and skin preps., are prepared by treatment of R1R2CHCO<sub>2</sub>H (R<sub>1</sub>, R<sub>2</sub> = same as above) with tris(hydroxymethyl)aminomethane (I), followed by hydrolysis of resulting oxazolines II (R<sub>1</sub>, R<sub>2</sub> = same as above). Treatment of α-octylarachic acid with I at .apprx.160° for 55 h gave 96.1% II (R1R2CH = octylnonadecyl), which was refluxed with aqueous EtOH for 92 h to afford 30.0% N-tris(hydroxymethyl)methyl-α-octylarachic acid amide. The amide 3.0, stearyltrimethylammonium chloride 2.0, and H<sub>2</sub>O 95.0% were mixed to give a hair rinse.

L8 ANSWER 25 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1993:222849 HCAPLUS  
 DOCUMENT NUMBER: 118:222849  
 TITLE: Electrostatographic toners using oxazoline ring-containing resin as binder  
 INVENTOR(S): Hosoda, Atsushi; Matsukuri, Kinji; Sugawara, Ryoza; Furuta, Hideyuki  
 PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04273255	A	19920929	JP 1991-34057	19910228 <--
PRIORITY APPLN. INFO.:			JP 1991-34057	19910228
GI				

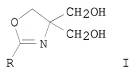


AB The title toners contain carbon black and, as a binder resin, a resin containing oxazoline ring in its mol. The resin shows good compatibility with carbon black, and hence the toners provide clear images. Thus, a polyester from the oxazoline compound I, bisphenol A-ethylene oxide adduct, and terephthalic acid, MA100, Bontron S-34 (charge-controlling agent), and 550P (polypropylene) were kneaded and pulverized to give a toner, which was mixed with an Fe powder to give a developer.

L8 ANSWER 26 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1992:650963 HCAPLUS  
 DOCUMENT NUMBER: 117:250963  
 TITLE: Preparation of fatty acid amides  
 INVENTOR(S): Nakagawa, Shoji; Kusumi, Tomokatsu  
 PATENT ASSIGNEE(S): Kao Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04224548	A	19920813	JP 1990-414273	19901226 <--
PRIORITY APPLN. INFO.:			JP 1990-414273	19901226
OTHER SOURCE(S):		CASREACT 117:250963; MARPAT 117:250963		

GI



AB The title compds. RCONHC(CH2OH)3 (II; R = C1-21 linear alkyl or alkenyl) are prepared by hydrolysis of oxazolines I in mixed solvents containing H2O and C1-6 alcs. A mixture of lauric acid and H2NC(CH2OH)3 was treated at 160° for 8 h to give 98.0% I (R = lauryl), hydrolysis of which in EtOH-H2O gave 60.7% II.

L8 ANSWER 27 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1992:526060 HCAPLUS  
 DOCUMENT NUMBER: 117:126060  
 TITLE: Investigations of four nitro and amino and related compounds with regard to their environmental behavior  
 AUTHOR(S): Freitag, D.; Fischer, K.; Behecti, A.; Korte, F.  
 CORPORATE SOURCE: Inst. Oekolog. Chem., GSF-Forschungszent. Umwelt  
 Gesund., Neuherberg, D-8042, Germany  
 SOURCE: GSF-Ber. (1992), 4/92, Ecol. Approaches  
 Environ. Chem., 73-83

CODEN: GSFBEI; ISSN: 0721-1694  
DOCUMENT TYPE: Report  
LANGUAGE: English  
AB Environmental behaviors of 2-amino-2-methyl-1-propanol tris(hydroxymethyl)nitromethane, 1-aza-3,7-dioxo-5-ethyl[3.3.0]octane, and heptadecyl-5-dihydroxymethyl-2-oxazoline are described.

L8 ANSWER 28 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 1992:6166 HCAPLUS  
DOCUMENT NUMBER: 116:6166  
TITLE: Preparation of N-tris(hydroxymethyl)methyl fatty amides as hair and skin moisturizers  
INVENTOR(S): Nakagawa, Shoji; Kojima, Masayo; Yokota, Yukinaga; Yahagi, Kazuyuki; Tashiro, Kazuhiro  
PATENT ASSIGNEE(S): Kao Corp., Japan  
SOURCE: Eur. Pat. Appl., 41 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 450527	A2	19911009	EP 1991-105051	19910328 <--
EP 450527	A3	19911030		
R: AT, CH, DE, ES, FR, GB, LI, NL				
JP 04009309	A	19920114	JP 1990-109762	19900425 <--
JP 04211640	A	19920803	JP 1991-60260	19910325 <--
PRIORITY APPLN. INFO.:			JP 1990-85224	A 19900330
			JP 1990-109762	A 19900425

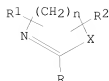
OTHER SOURCE(S): MARPAT 116:6166  
AB Title compds. R1CONHC(CH<sub>2</sub>OH)<sub>3</sub> (R1 = branched C4-27 alkyl) were prepared for use in hair and skin moisturizers. Thus isostearic acid and tris(hydroxymethyl)aminomethane were mixed and heated at 140-160° with stirring for 3 h, then at 160-196° for 3 h. The resulting 2-oxazoline was hydrolyzed to give title compound I (R1 = Me<sub>2</sub>CH(CH<sub>2</sub>)<sub>14</sub>) (II). II was formulated in a variety of cosmetics, including hair rinse, hair cream, styling lotion, conditioning mousse, and skin cream.

L8 ANSWER 29 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 1991:663486 HCAPLUS  
DOCUMENT NUMBER: 115:263486  
TITLE: Preparation of onazoline and imidazoline derivatives as body-membrane penetration enhancers  
INVENTOR(S): Rajadhyaksha, Vithal J.  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S., 17 pp. Cont.-in-part of U.S. 4,876,249.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5030629	A	19910709	US 1989-393584	19890811 <--
US 4876249	A	19891024	US 1987-2387	19870112 <--
PRIORITY APPLN. INFO.:			US 1987-2387	A2 19870112
			US 1989-345457	B2 19890501

OTHER SOURCE(S): CASREACT 115:263486; MARPAT 115:263486  
GI



I

AB Oxazoline and imidazoline derivs. [I; R = C1-19 hydrocarbon, alkoxyalkyl, haloalkyl, trifluoromethyl, alkoxy, amino, alkylamino; R1, R2 = H, alkyl, trifluoromethyl, alkoxyalkyl, aminoalkyl, alkyl, and acrylaminoalkyl, etc.; X = O, NR3 (R3 = H, alkyl, alkenyl, alkoxyalkyl, carbalkoxyalkyl etc.) n = 2-3] are prepared as penetration enhancers. 2-(2-Aminoethylamino)ethanol and Et dodecanoate were heated before Et was replaced with toluene and refluxed to remove water than distilled to give 1-(2-hydroxyethyl)-2-undecyl-2-imidazoline (II). A cream formulation containing isosorbide dinitrate 0.7 and II 2% was applied on the human stratum corneum and then it was put between diffusion cells. The average cumulative amount of II in the receptor side of diffusion cell after 48 h was 872 µg as compared to 535 for control with no II. Several topical formulation of therapeutic agents with above penetration enhancers are given.

L8 ANSWER 30 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 1990:139946 HCAPLUS

DOCUMENT NUMBER: 112:139946

TITLE: Synthesis of a nonionic polymer surfactant from cyclic imino ethers by the terminator method  
AUTHOR(S): Kobayashi, Shiro; Uyama, Hiroshi; Higuchi, Noriko; Saegusa, Takeo  
CORPORATE SOURCE: Fac. Eng., Tohoku Univ., Sendai, 980, Japan  
SOURCE: Macromolecules (1990), 23(1), 54-9  
CODEN: MAMOBX; ISSN: 0024-9297

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A nonionic polymer surfactant having a hydrophilic poly(N-acylalkylenimine) segment (from a cyclic imino ether) was synthesized in which a hydrophobic group was introduced by terminating the living end of the propagating polymer (terminator method). Monomers used for construction of the hydrophilic segment were 2-methyl- and 2-ethyl-2-oxazolines and 2-methyl-5,6-dihydro-4H-1,3-oxazine. The surfactant properties of the polymers were evaluated by surface tension (γ) of the aqueous polymer solution. Three kinds of terminators were employed. With 2-(higher alkyl)- or 2-[3-(perfluorooctyl)propyl]-4,4-dimethyl-2-oxazoline having reduced polymerizability, the living end of the propagating polymer was terminated and followed by hydrolysis to give a nonionic polymer surfactant having a higher alkyl or 3-(perfluorooctyl)propyl group. 2-Octyl- or 2-undecyl-5-methyl-2-oxazoline was used as a terminator in a similar method. With a primary or secondary (higher alkyl)amine and (perfluoroheptyl)methylamine, the living end of the polymer was terminated, followed by deionization to produce the polymer surfactant. The lowest λ value obtained by the third process was 19.5 dyn/cm for a polymer sample from 2-methyl-2-oxazoline/(perfluoroheptyl)methylamine terminator.

L8 ANSWER 31 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 1989:573417 HCAPLUS

DOCUMENT NUMBER: 111:173417

TITLE: Chemical modification in mass spectrometry. 11. A study on the mass spectra of 4,4-dimethyloxazoline



derivatives of hydroxy fatty acids  
 AUTHOR(S): Zhang, J. Y.; Yu, Q. T.; Yang, Y. M.; Huang, Z. H.  
 CORPORATE SOURCE: Shanghai Inst. Mater. Med., Chin. Acad. Sci.,  
 Shanghai, 200031, Peop. Rep. China  
 SOURCE: Chemica Scripta (1988), 28(4), 357-63  
 CODEN: CSRPB9; ISSN: 0004-2056  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 111:173417  
 AB The 4,4-dimethyloxazoline derivs. of hydroxy fatty acids show well  
 interpretable mass spectra, by which the position of hydroxyl and unsatd.  
 functions can easily be deduced. These derivs. are suitable for direct  
 structure determination of hydroxy acid components in mixts. by using in-beam  
 electron-ionization (IBEI) coupled with B/E-linked scanning technique.  
 The HO substitution at 2-position gives a preferential loss of C<sub>2</sub>H<sub>5</sub>O•  
 via an  $\alpha$ -hydroxyl-assisted extrusion mechanism as evidenced by  
 deuterium-labeling expts.

L8 ANSWER 32 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1989:553427 HCAPLUS  
 DOCUMENT NUMBER: 111:153427  
 TITLE: Chemical modification in mass spectrometry. 7.  
 Combined in-beam electron impact-B/E-linked scan mass  
 spectrometry of oxazoline derivatives for the  
 structure determination of long-chain unsaturated  
 fatty acids  
 AUTHOR(S): Yang, Y. M.; Zhang, J. Y.; Huang, Z. H.  
 CORPORATE SOURCE: Shanghai Inst. Materia Medica, Chin. Acad. Sci.,  
 Shanghai, 200031, Peop. Rep. China  
 SOURCE: Journal of Lipid Research (1989), 30(1),  
 127-33  
 CODEN: JLPRAW; ISSN: 0022-2275  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Long-chain unsatd. fatty acids (UFA) having  $\leq 6$  double bonds are  
 derivatized to 2-substituted 4,4-dimethyloxazolines and then analyzed by  
 combined in-beam electron impact (IBEI)-B/E-linked scan mass spectrometry.  
 This technique provides highly characteristic mass spectra and may serve  
 as an auxiliary means for direct structure determination of individual UFA in  
 mixts.

L8 ANSWER 33 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1989:474261 HCAPLUS  
 DOCUMENT NUMBER: 111:74261  
 TITLE: Location of double bonds in fatty acids of fish oil  
 and rat testis lipids. Gas chromatography-mass  
 spectrometry of the oxazoline derivatives  
 AUTHOR(S): Yu, Q. T.; Liu, B. N.; Zhang, J. Y.; Huang, Z. H.  
 CORPORATE SOURCE: Shanghai Inst. Materia Med., Chin. Acad. Sci.,  
 Shanghai, 200031, Peop. Rep. China  
 SOURCE: Lipids (1989), 24(1), 79-83  
 CODEN: LPDSAP; ISSN: 0024-4201  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A new approach to the derivatization and anal. of long-chain polyunsatd.  
 fatty acids is described. The method is based on the formation of  
 2-alkenyl-4,4-dimethyloxazolines by condensation of the starting material  
 with 2-amino-2-methylpropanol. The derivatization method is rapid,  
 efficient, and specific with respect to the chain feature of the parent  
 acids. Volatility, comparable with that of the corresponding simple  
 esters, and improved GC separation are achieved without difficulty. The  
 derivs. exhibit clear and regular fragmentation patterns that allow easy

discrimination of positional isomers and assignment of double bond location in the chain.

L8 ANSWER 34 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:209324 HCAPLUS

DOCUMENT NUMBER: 110:209324

TITLE: Location of triple bonds in the fatty acids from the kernel oil of *Pyralia edulis* by GC-MS of their 4,4-dimethyloxazoline derivatives  
AUTHOR(S): Zhang, J. Y.; Yu, X. J.; Wang, H. Y.; Liu, B. N.; Yu, Q. T.; Huang, Z. H.

CORPORATE SOURCE: Shanghai Inst. Mater. Med., Chin. Acad. Sci., Shanghai, 200031, Peop. Rep. China

SOURCE: JAOCs, J. Am. Oil Chem. Soc. (1989), 66(2), 256-9

CODEN: JJASDH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Location of triple bonds in long-chain fatty acids was achieved by mass spectrometry or gas chromatog.-mass spectrometry of their 4,4-dimethyloxazoline (DMOX) derivs. The position of acetylenic linkage, either isolated or conjugated with olefinic bond(s) is indicated by a clear separation of 10 amu between the highest peaks of 2 neighboring fragment clusters. The acetylenic acid components of the kernel oil of *P. edulis* were found to be 17:1(8a), 18:1(9a), 18:2(9a,11), 18:2(9a,17), and 18:3(9a,11,17).

L8 ANSWER 35 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:188883 HCAPLUS

DOCUMENT NUMBER: 110:188883

TITLE: Location of methyl branchings in fatty acids: fatty acids in uropygial secretion of Shanghai duck by GC-MS of 4,4-dimethyloxazoline derivatives [Erratum to document cited in CA109(23):207846V]

AUTHOR(S): Yu, Q. T.; Liu, B. N.; Zhang, J. Y.; Huang, Z. H.

CORPORATE SOURCE: Shanghai Inst. Mater. Med., Chin. Acad. Sci., Shanghai, 200031, Peop. Rep. China

SOURCE: Lipids (1989), 24(2), 160

CODEN: LPDSAP; ISSN: 0024-4201

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Errors in the abstract, Figure 1, and Table 3 footnote have been corrected GC-MS

has identified 66 out of a total of 68 fatty acids, not 76 out of a total of 86 as reported in the original article. The error was reflected in the abstract

L8 ANSWER 36 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:94689 HCAPLUS

DOCUMENT NUMBER: 110:94689

TITLE: Method for the production of 2-benzyl fatty acids

INVENTOR(S): Krause, Horst Jurgan

PATENT ASSIGNEE(S): Henkel K.-G.a.A., Fed. Rep. Ger.

SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

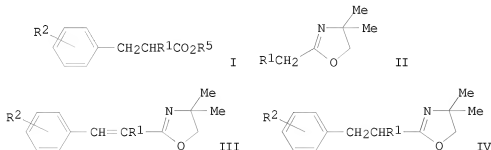
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 284937 A2 19881005 EP 1988-104454 19880321 <--  
 EP 284937 A3 19890726  
 R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE  
 DE 3710516 A1 19881020 DE 1987-3710516 19870330 <--  
 US 4833247 A 19890523 US 1988-172109 19880323 <--  
 PRIORITY APPLN. INFO.: DE 1987-3710516 A 19870330  
 OTHER SOURCE(S): MARPAT 110:94689  
 GI



AB A procedure for preparing benzyl fatty acids I (R1 = C4-20 alkyl, alkenyl; R2 = H, C1-4 alkyl, Cl, Br, NO2, OR3, NR3R4; R3, R4 = C1-4 alkyl; NR3R4 = pyrrolidino, piperidino, morpholino, piperazino; R3 = H, R4 = C1-4 acyl; R5 = H, C1-4 alkyl) was characterized in that oxazolines II react with R2C6H4CHO to give benzylidene compds. III which were hydrogenated to phenethyl analogs IV. These were hydrolyzed or solvolized with R5OH to I. Cyclization of Me2C(NH2)CH2OH with Me(CH2)6CO2H gave >85% II (R1 = hexyl) which condensed with BzH in cumene containing sulfonic acid to give 90% III (R1 = hexyl, R2 = H). Catalytic hydrogenation gave 90% IV (R1 = hexyl, R2 = H) which was hydrolyzed with HCl to give 97% (±)-I (R1 = hexyl, R2 = R5 = H).

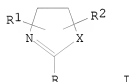
L8 ANSWER 37 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN  
 ACCESSION NUMBER: 1989:23148 HCAPLUS  
 DOCUMENT NUMBER: 110:23148  
 TITLE: 2-Alkenyl-4,4-dimethyloxazolines as useful derivatives for the double bond location of long-chain unsaturated fatty acids  
 AUTHOR(S): Zhang, J. Y.; Yu, Q. T.; Liu, B. N.; Huang, Z. H.  
 CORPORATE SOURCE: Shanghai Inst. Mater. Med., Chin. Acad. Sci., Shanghai, 200031, Peop. Rep. China  
 SOURCE: Shitsuryo Bunseki (1987), 35(5), 308-11  
 CODEN: SHIBAK; ISSN: 0542-8645  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 110:23148

AB The mass-spectral determination of the position of double bonds in unsatd. fatty acids is facilitated by the conversion to the oxazolines (by the neat quant. reaction with NH2CMe2CH2OH); the unsatd. oxazolines do not isomerize under mass spectral conditions. The mass-spectral and gas-chromatog. characteristics of these derivs. are discussed.

L8 ANSWER 38 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN  
 ACCESSION NUMBER: 1988:637052 HCAPLUS  
 DOCUMENT NUMBER: 109:237052  
 TITLE: Five-membered heterocyclic compounds as penetration-enhancing agent for transdermal drugs

INVENTOR(S): Rajadhyaksha, Vithal J.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: PCT Int. Appl., 63 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8804938	A1	19880714	WO 1987-US2846	19871102 <--
W: JP				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
US 4876249	A	19891024	US 1987-2387	19870112 <--
EP 296199	A1	19881228	EP 1988-900498	19871102 <--
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 01502191	T	19890803	JP 1988-501176	19871102 <--
PRIORITY APPLN. INFO.:			US 1987-2387	A 19870112
			WO 1987-US2846	W 19871102
OTHER SOURCE(S):		CASREACT 109:237052; MARPAT 109:237052		
GI				



AB The heterocyclic compds. I (R = C5-19 hydrocarbyl; R1, R2 = H, alkyl, CF3, alkoxyalkyl, hydroalkyl; X = O, NR3; R3 = H, alkyl, alkenyl, hydroxyalkyl, alkoxyalkyl) are prepared as penetration-enhancing agents for transdermal drugs or systemic formulations. The reaction of 2-aminoethanol with undecyl cyanide in Cd(OAc)2-containing BuOH gave 2-undecyl-2-oxazoline. 4,4-Dimethyl-2-undecyl-2-oxazoline enhanced the in vitro penetration of hydrocortisone through mouse skin more than the standard azone did. An antineoplastic solution contained 5-fluorouracil 5, 1-isopropyl-2-undecyl-2-imidazoline 1.5, polyethylene glycol 5, and water 88.5%.

L8 ANSWER 39 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

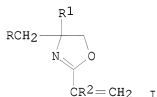
ACCESSION NUMBER: 1988:607846 HCAPLUS  
 DOCUMENT NUMBER: 109:207846  
 TITLE: Location of methyl branchings in fatty acids: fatty acids in uropygial secretion of Shanghai duck by GC-MS of 4,4-dimethyloxazoline derivatives  
 AUTHOR(S): Yu, Q. T.; Liu, B. N.; Zhang, J. Y.; Huang, Z. H.  
 CORPORATE SOURCE: Shanghai Inst. Mater. Med., Chin. Acad. Sci., Shanghai, 200031, Peop. Rep. China  
 SOURCE: Lipids (1988), 23(8), 804-10  
 CODEN: LPDSDP; ISSN: 0024-4201  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 109:207846

AB 2-Substituted 4,4-dimethyloxazolines (DMOX) are a useful alternative to the commonly used Me esters for localization of unsatd. bonds and other substituents in the fatty chain by mass spectrometry. The powerful directed fragmentation coupled with good gas chromatog. ability enables the structure elucidation of modified fatty acids in complex mixts.

Continuing the previous study, 76 out of a total of 86 fatty acids obtained from the preen gland wax of Shanghai duck now have been identified by gas chromatog.-mass spectrometry (GC-MS) of their oxazoline derivs. The identification was based on the interpretation of the mass spectra and comparison with the spectra and equivalent chain lengths (ECL) of the corresponding Me esters. Main components of this lipid mixture are straight-chain fatty acids (8.22%), and 2-, 4-, or 6-monomethyl branched acids (53.69%), amounting to 61.91% of the total fatty acid fraction. In addition, a large number of di-Me-substituted fatty acids (31.4%) also have been found. Typical mass spectra, which are easily recognizable and highly specific for fatty acids substituted at various positions, are presented and classified according to the structural feature of the chain.

L8 ANSWER 40 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1988:592298 HCAPLUS  
 DOCUMENT NUMBER: 109:192298  
 TITLE: Manufacture of fatty acid- or oil-modified resin solutions for air- or oven-dried coatings  
 INVENTOR(S): Benyi, Gyozo; Szabo, Lajos; Varadi, Tibor  
 PATENT ASSIGNEE(S): Budalakk Festek es Mugyantagyar, Hung.  
 SOURCE: Hung. Teljes, 30 pp.  
 CODEN: HUXXB  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Hungarian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
HU 44587	A2	19880328	HU 1986-1870	19860507 <--
PRIORITY APPLN. INFO.:			HU 1986-1870	19860507
OTHER SOURCE(S):			MARPAT 109:192298	



AB Storage-stable binders for fast-drying, water- and chemical-resistant coatings are manufactured by reaction of 0.5-5 parts C1-4 alkyl (meth)acrylate with conjugated unsatd. fatty acid-modified alkyd resins 35-75, conjugated unsatd. fatty acid-modified epoxy resins 35-75, or conjugated unsatd. fatty acid dianhydride-modified oil 70-95 parts, 24.5-60 parts (if the modified alkyd resin is used) or 4.5-25 parts (if the modified epoxy resin or oil is used) vinyl monomer, and 0.2-40 parts (based on vinyl monomer) oxazoline derivs. I (R = H, R<sub>3</sub>CH<sub>2</sub>CO<sub>2</sub>; R<sub>1</sub> = C1-4 alkyl, CH<sub>2</sub>COCH<sub>2</sub>R<sub>4</sub>; R<sub>3</sub>, R<sub>4</sub> = C4-18 alkyl, alkenyl; R<sub>2</sub> = C4-18 alkyl, alkenyl, C12-18 hydroxyalkyl, Ph) in the presence of a free-radical initiator or by reaction of 30-90 parts conjugated unsatd. fatty acid triglyceride with 5-20 parts vinyl monomer and 0.2-40 parts (based on vinyl monomer) I in the presence of a free-radical initiator followed by reaction with 4.8-58 parts epoxy resins or diacids, polyols, and saturated acids, and 0.2-2 parts C1-4 hydroxyalkyl (meth)acrylate optionally in the presence of a condensation catalyst. Thus, a linoleic acid-containing fatty acid mixture (iodine number 130, conjugated

double bond concentration 50%) 145, Zn octoate 0.03, and epoxy resin (epoxy equivalent 550) 115 parts were mixed at 75° in xylene and heated at 240° under CO2 with removal of the water-of-reaction while the resin exhibited >5 mg KOH/g to give a product with 60%-xylene-solution viscosity 120-160 s (number 4 cup). To a mixture containing 165 parts of a 60% solution of this latter product, 0.9 parts 2-hydroxyethyl methacrylate, and 1 part I (R = C17H35CO2, R1 = C17H35CO2CH2, R2 = C16H33) (II) was added in 4 h 63.5 parts mixture containing styrene 52.1, methacrylic acid 17.5, and di-tert-Bu peroxide 2 parts, and the reaction mixture was heated an addition 2 h at 165-170° to give a second product with acid value 20 mg KOH/g and 60%-xylene-solution viscosity 600 s (number 4 cup). A 65% xylene solution

of

the second product 48, TiO2 22, Co octoate (Co concentration 6%) 0.5, Pb octoate (Pb concentration 20%) 2, polysiloxane 0.3, and xylene 37.2 parts were mixed to give a transparent solution that was stable for 12 mo and provided a coating that exhibited no change in resistance to water or 2% aqueous Na2CO3 according to the MSZ 9640/36 test and drying time 0.8 h, whereas a similar composition prepared in the absence of II was translucent, stable for 7 mo, and provided a coating that wrinkled in contact with water and 2% aqueous Na2CO3 solution

and

had a drying time of 1.1 h.

L8 ANSWER 41 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:552957 HCAPLUS  
DOCUMENT NUMBER: 109:152957  
TITLE: Soluble oil concentrate and emulsifier system used therein  
INVENTOR(S): Durr, Albert M., Jr.; Hardy, Bryant J.  
PATENT ASSIGNEE(S): Conoco, Inc., USA  
SOURCE: U.S., 5 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 4758374	A	19880719	US 1987-26509	19870317 <--

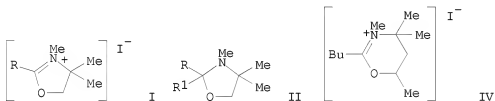
PRIORITY APPLN. INFO.: US 1987-26509 19870317  
OTHER SOURCE(S): MARPAT 109:152957  
AB A soluble oil concentrate which forms stable emulsions with water (e.g., useful as hydraulic fluids for coal-mine roof jacks) is prepared by combining an emulsifier system containing (a) an oxazoline derivative and an amide and (b) an ether sulfate ammonium salt surfactant with a base oil. The oxazoline derivative and amide contain straight or branched chain alc. and fatty acid substituents. The ether sulfate ammonium salt contains a mixture of alkyl groups. Thus, a formulation containing paraffin base oil 81.5, Penreco Morco soluble oil base 17.0, Alkaterge T-IV (oxazoline derivs.) 0.5, and Stepsol CA 207 (ether sulfate ammonium salt) 1.0 weight% was subjected to the skin test, rust test, and emulsion separation test, resulting in no skin formation, passing both rust test (at 3% and 5% solution), and retaining 69% emulsion at 158°F after 1 wk.

L8 ANSWER 42 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:492857 HCAPLUS  
DOCUMENT NUMBER: 109:92857  
TITLE: Chemical modification in mass spectrometry IV  
2-alkenyl-4,4-dimethyloxazolines as derivatives for

the double bond location of long-chain olefinic acids  
 AUTHOR(S): Zhang, J. Y.; Yu, Q. T.; Liu, B. N.; Huang, Z. H.  
 CORPORATE SOURCE: Shanghai Inst. Mater. Med., Acad. Sin., Shanghai,  
 200031, Peop. Rep. China  
 SOURCE: Biomedical & Environmental Mass Spectrometry (1988), 15(1), 33-44  
 CODEN: BEMSEN; ISSN: 0887-6134  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Long-chain unsatd. fatty acids (UFA) can easily be converted on a microgram scale to the corresponding 2-alkenyl-4,4-dimethylloxazolines by condensation with 2-amino-2-methylpropanol (AMP). These modified mols. with a hidden carboxyl group are a class of useful derivs. for gas chromatog./mass spectrometry (GC/MS) of UFA mixts. While possessing very good GC characteristics, the title compds. show regular, well-recognizable diagnostic ion peaks of the double bond position in the chain. Detailed description of the method as well as electron impact (EI) mass spectra of derivs. resulting from mono-, di-, and polyenoic (maximum containing six double bonds) acids are presented.

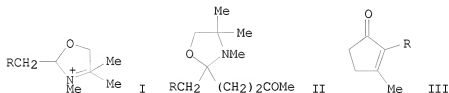
L8 ANSWER 43 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1988:186666 HCAPLUS  
 DOCUMENT NUMBER: 108:186666  
 TITLE: Formation of a novel acyl anion equivalent by the electroreduction of oxazolinium salts  
 AUTHOR(S): Shono, Tatsuya; Kashimura, Shigenori; Yamaguchi, Yoshihide; Ishige, Osamu; Uyama, Hiroshi; Kuwata, Fumitaka  
 CORPORATE SOURCE: Fac. Eng., Kyoto Univ., Kyoto, 606, Japan  
 SOURCE: Chemistry Letters (1987), (8), 1511-12  
 CODEN: CMLTAG; ISSN: 0366-7022  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 108:186666  
 GI



AB Electrochem. reduction of oxazolinium iodides I [R = Me(CH<sub>2</sub>)<sub>10</sub>, Me(CH<sub>2</sub>)<sub>8</sub>] in the presence of MeSO<sub>3</sub>H, followed by hydrolysis of the resulting N,O-acetals II (R<sub>1</sub> = H), gave RCHO [R = Me(CH<sub>2</sub>)<sub>10</sub>, Me(CH<sub>2</sub>)<sub>8</sub>] in 70 and 82% yields, resp. Similar reduction of I [R = PhCH<sub>2</sub>CH<sub>2</sub>, Pr, MeO<sub>2</sub>C(CH<sub>2</sub>)<sub>7</sub>] in the presence of benzyl bromides 4-R<sub>2</sub>C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>Br (III, R<sub>2</sub> = H, CO<sub>2</sub>Me, cyano, Cl) gave acetals II [R = PhCH<sub>2</sub>CH<sub>2</sub>, Pr, MeO<sub>2</sub>C(CH<sub>2</sub>)<sub>7</sub>; R<sub>1</sub> = CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>R<sub>2</sub>-4] in 61-83% yields. Analogous electrochem. reduction of oxazolinium iodide IV in the presence of III (R<sub>2</sub> = CO<sub>2</sub>Me, H) gave, after hydrolysis, BuCOCH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>R<sub>2</sub>-4 (R<sub>2</sub> = CO<sub>2</sub>Me, H) in 66 and 72% yields, resp.

L8 ANSWER 44 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1988:186617 HCAPLUS  
 DOCUMENT NUMBER: 108:186617  
 TITLE: Electroorganic chemistry. 110. Michael addition of novel acyl anion equivalents generated by the

electroreduction of oxazolinium salts to activated olefins  
 AUTHOR(S): Shono, Tatsuya; Kashimura, Shigenori; Yamaguchi, Yoshihide; Kuwata, Fumitaka  
 CORPORATE SOURCE: Fac. Eng., Kyoto Univ., Kyoto, 606, Japan  
 SOURCE: Tetrahedron Letters (1987), 28(38), 4411-14  
 CODEN: TELEAY; ISSN: 0040-4039  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 108:186617  
 GI



AB Electroreduction of oxazolinium salts gave novel acyl anion equivalent (AAEs), and the Michael addition of these AAEs to activated olefins has been found to be promoted effectively by the addition of  $\text{ClSiMe}_3$  to the reaction system. Thus, electrochemical reduction and Michael addition of oxazolinium salts I [ $\text{R} = \text{Me}(\text{CH}_2)_4$ ,  $\text{EtCH}(\text{CH}_2)_2$ ] to  $\text{H}_2\text{C}=\text{CHCOMe}$  gave N,O-acetals II in 54 and 57% yields, resp. Hydrolysis and ring closure by II gave dihydrojasmones and cis-jasmone III in 71 and 88% yields, resp.

L8 ANSWER 45 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1988:58299 HCAPLUS  
 DOCUMENT NUMBER: 108:58299  
 TITLE: Chemical modification in mass spectrometry. 5.  
 2-Substituted 4,4-dimethyloxazolines as useful derivatives for the localization of cyclopropane rings in long-chain fatty acids

AUTHOR(S): Zhang, J. Y.; Yu, Q. T.; Huang, Z. H.  
 CORPORATE SOURCE: Shanghai Inst. Mater. Med., Chin. Acad. Sci., Shanghai, 200031, Peop. Rep. China  
 SOURCE: Shitsuryo Bunseki (1987), 35(1), 23-30  
 CODEN: SHIBAK; ISSN: 0542-8645

DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB A convenient method for cyclopropane ring localization in long-chain fatty acids is developed by converting the carboxylic acids with 2-amino-2-methylpropanol into 2-substituted 4,4-dimethyloxazolines and examining the resulting 70 eV electron-ionization mass spectra.

L8 ANSWER 46 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1987:579918 HCAPLUS  
 DOCUMENT NUMBER: 107:179918  
 TITLE: Electroviscous fluids  
 INVENTOR(S): Goossens, John; Oppermann, Guenter; Grape, Wolfgang  
 PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 10 pp.  
 CODEN: GWXXBX

DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:



PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3536934	A1	19870423	DE 1985-3536934	19851017 <--
US 4702855	A	19871027	US 1986-914211	19861001 <--
NO 8603932	A	19870421	NO 1986-3932	19861002 <--
NO 168537	B	19911125		
NO 168537	C	19920304		
EP 219751	A2	19870429	EP 1986-113763	19861004 <--
EP 219751	A3	19891011		
EP 219751	B1	19921223		

R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE

AT 83794	T	19930115	AT 1986-113763	19861004 <--
ES 2053427	T3	19940801	ES 1986-113763	19861004 <--
JP 62095397	A	19870501	JP 1986-241567	19861013 <--
FI 8604166	A	19870418	FI 1986-4166	19861015 <--
FI 82260	B	19901031		
FI 82260	C	19910211		
AU 8663954	A	19870430	AU 1986-63954	19861015 <--
AU 579945	B2	19881215		
CA 1280590	C	19910226	CA 1986-520461	19861015 <--
DK 8604953	A	19870418	DK 1986-4953	19861016 <--
DK 162725	B	19911202		
DK 162725	C	19920421		
ZA 8607836	A	19870624	ZA 1986-7836	19861016 <--
BR 8605052	A	19870714	BR 1986-5052	19861016 <--

# PRIORITY APPLN. INFO.:

DE 1985-3536934	A	19851017
EP 1986-113763	A	19861004

AB An electroviscous fluid, e.g., used in clutches and hydraulic valves, consists of suspensions of >25 weight% Al silicates (with 1-25 weight% water content) as disperse phase, an elec. nonconducting hydrophobic liquid as liquid phase (e.g., silicone oil), and a dispersing agent. The Al-Sn atomic ratio on the surface of Al silicates is 0.15-0.80. The dispersing agents are amino-, hydroxy-, acetoxy-, or alkoxy-functionalized polysiloxanes with mol. weight >800. The concentration of functionalized polysiloxanes is 1-30 weight% (preferably 5-20 weight%) based on the weight of Al silicates.

L8 ANSWER 47 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 1987:579580 HCAPLUS  
DOCUMENT NUMBER: 107:179580  
TITLE: Emulsion explosive composition  
INVENTOR(S): Cooper, John; Kirby, Ian John  
PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK  
SOURCE: Brit. UK Pat. Appl., 10 pp.  
CODEN: BAXXDU  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2181725	A	19870429	GB 1986-20253	19860820 <--
GB 2181725	B	19890831		
ZA 8606517	A	19870527	ZA 1986-6517	19860827 <--
NO 8603451	A	19870320	NO 1986-3451	19860828 <--
AU 8662145	A	19870326	AU 1986-62145	19860901 <--
AU 589207	B2	19891005		
CA 1298975	C	19920421	CA 1986-518276	19860916 <--

# PRIORITY APPLN. INFO.:

GB 1985-23127	A	19850919
GB 1986-1370	A	19860121

AB The quality of emulsion explosive compns. comprising a discontinuous phase having an O-supplying component and an organic medium forming a continuous phase is improved by a manufacturing process and apparatus in which a predetd. range

of acceptable values for an elec. characteristic (e.g., elec. conductivity or capacitance) of the explosive is established, the selected property is determined, and, in response to measured properties outside of the range, the unacceptable composition is diverted or modified to fall within the preferred range. A mixture of 78.7 NH<sub>4</sub>NO<sub>3</sub> and 16.0 parts water, heated to 85°, was rapidly stirred into a solution of 1.5 sorbitan monooleate and 3.8 parts paraffin oil. The elec. capacitance of emulsion samples was determined in a closed flat cell comprising a pair of stainless steel electrodes (each with surface area 10 cm<sup>2</sup>) spaced 3 mm apart. The capacitance, which was correlated with the emulsion droplet size, was a better means of quality control than optical microscopic examination. Compns. with decreased emulsion droplet size generally have increased sensitivity and improved storage stability.

L8 ANSWER 48 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:461835 HCAPLUS

DOCUMENT NUMBER: 107:61835

TITLE: Grease compositions containing borated compounds and hydroxy-containing soap thickeners

INVENTOR(S): Doner, John Phillips; Horodysky, Andrew Gene; Keller, John Antone, Jr.

PATENT ASSIGNEE(S): Mobil Oil Corp., USA

SOURCE: Eur. Pat. Appl., 20 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

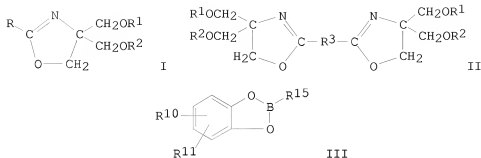
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 213885	A2	19870311	EP 1986-306447	19860820 <--
EP 213885	A3	19880921		
EP 213885	B1	19911106		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
US 4655948	A	19870407	US 1985-769837	19850827 <--
CA 1273332	A1	19900828	CA 1986-514764	19860728 <--
ZA 8605797	A	19880330	ZA 1986-5797	19860801 <--
AU 8661059	A	19870305	AU 1986-61059	19860811 <--
AU 596984	B2	19900524		
AT 69259	T	19911115	AT 1986-306447	19860820 <--
JP 62050395	A	19870305	JP 1986-197007	19860822 <--
US 4781850	A	19881101	US 1987-24235	19870310 <--
US 4828734	A	19890509	US 1987-54121	19870514 <--
US 5068045	A	19911126	US 1990-596624	19901010 <--
PRIORITY APPLN. INFO.:				
			US 1985-769827	A 19850827
			US 1985-769837	A 19850827
			US 1985-769912	A 19850827
			EP 1986-306447	A 19860820
			US 1987-57155	B1 19870504
			US 1990-511803	B1 19900417

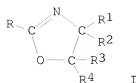
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AB A lubricating grease composition contains a major portion of a grease, 3-20 weight% hydroxy-containing thickener, and 0.2-10 weight% borated compound prepared by reacting a B compound with a compound selected from (a) an oxazoline of general formula I or II ( $R = C1-50$  alkyl or alkenyl group,  $>1$  of  $R1$  or  $R2 = H$ , or  $COR4$  where  $R4 = H$  or  $C1-50$  hydrocarbyl), (b) a hydroxyl-containing amide of general formula  $R7CON(R8) \times H[(R9)yH]$  ( $R7 = C1-60$  hydrocarbyl, and addnl. containing S, O, and/or N;  $R8$  and  $R9 =$  alkenyl, or a mixture of  $C2-6$  alkylene groups;  $x = 0-15$ ,  $y = 0-15$ , provided that  $x + y \geq 1$ ), or (c) catechol to form a compound of general formula III ( $R10$  and  $R11 = H$ , or  $C1-40$  hydrocarbyl;  $R15 = C1-40$  hydrocarbons which can contain addnl. O, N, S, or B; an  $NR12$  group where  $R12 = C1-40$  hydrocarbons which can contain addnl. O, S, or N; an  $OR13$  group where  $R13 = C1-40$  hydrocarbons which can contain addnl. O, S, or N; or an  $OR14$  group where  $R14 = B$ , or a catechol, ester, or hydroxyl-containing moiety). S and P compds. can also be incorporated into the composition. Thus, a Li hydroxystearate-thickened base grease (dropping point  $202^\circ$ , ASTM D-2265) containing 2 weight% heptadecenyl oxazoline monooleate borate [prepared by reacting tris(hydroxymethyl)aminomethane, oleic acid, and boric acid] had a dropping point of  $232^\circ$ .

L8 ANSWER 49 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1987:442902 HCAPLUS  
DOCUMENT NUMBER: 107:42902  
TITLE: Multifunctional antiwear additives and compositions thereof  
INVENTOR(S): Horodysky, Andrew G.  
PATENT ASSIGNEE(S): Mobil Oil Corp., USA  
SOURCE: U.S., 5 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4657684	A	19870414	US 1985-746484	19850619 <---
PRIORITY APPLN. INFO.:			US 1985-746484	19850619
GI				



AB Antifriction-antiwear additives for lubricating oils, present at 0.001-10 weight% (preferably 0.1-3 weight%) concentration, contain an oxazoline-derived internal

acid phosphate prepared by reacting P2O5 with a hydroxyalkyl hydrocarbyl oxazoline (I, R = C8-30 hydrocarbyl or acyl sarcosine-derived group consisting of R5CON(Me)CH2 in which R5 is C8-30 hydrocarbyl, and  $\geq 1$  of R1, R2, R3, and R4 is/are C1-6 hydroxyalkyl and the remaining R1, R2, R3, and R4 are H, C1-30 hydrocarbyl, C1-6 hydroxyalkyl, or CH2O(CO)R6 in which R6 is H, C1-30 hydrocarbyl or R5CON(Me)CH2-acyl sarcosine-derived group). Thus, a formulated lubricating oil was blended with 1.0 weight% of the reaction product of I [R2 = R3 = H; R4 = R5 = H; R = (CH2)7CH:CH(CH2)7CH3] with P2O5, resulting in 17% reduction of friction

coefficient (at 30 ft/min), compared with no reduction for the lubricating oil containing no additive.

L8 ANSWER 50 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:138920 HCAPLUS

DOCUMENT NUMBER: 106:138920

ORIGINAL REFERENCE NO.: 106:22683a, 22686a

TITLE: Preparation of thermosetting oxazoline-polyol-

polyisocyanate polymers

INVENTOR(S): Goel, Anil B.; Tufts, Timothy A.; Blackburn, Peggy A.

PATENT ASSIGNEE(S): Ashland Oil, Inc., USA

SOURCE: U.S., 4 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4640969	A	19870203	US 1985-763107	19850807 <--
EP 260339	A1	19880323	EP 1986-112843	19860917 <--
EP 260339	B1	19910313		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 61608	T	19910315	AT 1986-112843	19860917 <--
JP 63077917	A	19880408	JP 1986-218243	19860918 <--
CA 1265291	A1	19900130	CA 1986-518759	19860922 <--
PRIORITY APPLN. INFO.:			US 1985-763107	19850807
			EP 1986-112843	A 19860917

GI For diagram(s), see printed CA Issue.

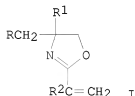
AB The title polymers are prepared by polymerizing the compds. I (R, R1 = H, C1-10 alkyl, C6-12 aryl; Z = C1-20 alkyl, C7-20 aralkyl when m = 1 or C1-19 alkylene when m = 2; m = 1 or 2, n = 2 or 3) with polyols and polyisocyanates at 20-100°/1-50 atmospheric Polymerizing butanediol 3.0, 2-ethyl-2-oxazoline 0.2, and MDI 10 g at room temperature gave a polymer with gel time 2.5 min and exotherm 185°.

L8 ANSWER 51 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:86313 HCAPLUS  
 DOCUMENT NUMBER: 106:86313  
 ORIGINAL REFERENCE NO.: 106:14149a,14152a  
 TITLE: Water-thinned coatings from acrylic polymers or polyurethanes and fatty acid- or oil-modified resins  
 INVENTOR(S): Benyi, Gyozo; Szabo, Lajos; Varadi, Tibor  
 PATENT ASSIGNEE(S): Budalakk Festek es Mugyantagyar, Hung.  
 SOURCE: Ger. Offen., 29 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3523792	A1	19861120	DE 1985-3523792	19850703 <--
HU 191791	B	19870428	HU 1985-1838	19850516 <--
AT 8501987	A	19911015	AT 1985-1987	19850704 <--
AT 394566	B	19920511		

PRIORITY APPLN. INFO.: HU 1985-1838 A 19850516  
 OTHER SOURCE(S): MARPAT 106:86313  
 GI



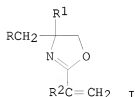
AB A hybrid coating material is prepared by diluting with water a mixture of an epoxy resin, alkyd resin, or oil modified with conjugated unsatd. fatty acids (I2 number 110-180) in a polar organic solvent a mixture of 0.2-40% vinylloxazoline I (R = H, R3CH2CO2; R1 = C1-4 alkyl, R3CH2CO2CH2; R2, R3 = C1-18 alkyl, alkenyl, aryl) and 1-6% peroxide, adjusting to pH 6-10, and mixing in 2-98:2-98 ratio (as solids) with poly(meth)acrylate and/or polyurethane dispersions. To 145 parts fatty acid mixture (≥20% conjugated) containing 0.03% Zn octanoate at 75° was added 115 parts epoxy resin (epoxy equivalent 550). After being heated at 240° with azeotropic distillation of H2O until the acid number was 5 mg KOH/g, the was diluted to 60% solids with BuOCH2CH2OH, and 165 parts solution was mixed with 1 part I (RCH2 = R1 = n-C17H35CO2CH2, R2 = n-C16H33) and, at 165-170° over 4 h, with styrene 53, methacrylic acid 17.5, and tert-Bu2O2 2 parts. After 2 h at 165-170° (acid number 50-65), BuOCH2CH2OH was added to 70% solids and the pH was adjusted to 8-9 with Et3N. An indoor/outdoor paint for wood was formulated from the solution (65% solids) 90.0, Co octanoate (6% Co) 1.0, Ca octanoate (10% Ca) 0.5, MEK oxime 0.5, SiO2 15.0, C1CH2CONHCH2OH 25.0, poly(acrylic acid) 14.0, H2O 250.0, 40% Bu acrylate-Me Methacrylate copolymer dispersion 500, and Fe2O3 paste 104 parts.

L8 ANSWER 52 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1987:86312 HCAPLUS  
 DOCUMENT NUMBER: 106:86312

ORIGINAL REFERENCE NO.: 106:14149a,14152a  
 TITLE: Manufacture of water-thinned coatings from fatty acid-  
 or oil-modified resins and vinyloxazolines  
 INVENTOR(S): Benyi, Gyozo; Szabo, Lajos; Varadi, Tibor  
 PATENT ASSIGNEE(S): Budalakk Festek es Mugyanyaggyar, Hung.  
 SOURCE: Ger. Offen., 22 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3523800	A1	19861120	DE 1985-3523800	19850703 <--
HU 191790	B	19870428	HU 1985-1837	19850516 <--
AT 8501986	A	19911115	AT 1985-1986	19850704 <--
			HU 1985-1837	A 19850516

PRIORITY APPLN. INFO.:  
 OTHER SOURCE(S): MARPAT 106:86312  
 GI

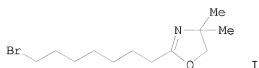


AB A coating material is prepared by diluting with water a mixture of an epoxy resin, alkyd resin, or oil modified with conjugated unsatd. fatty acids (I2 number 110-180) in a polar organic solvent and mixts. of 0.2-40% oxazoline I

(R = H, R3CH2CO2; R1 = C1-4 alkyl, R3CH2CO2CH2R2; R3 = C1-18 alkyl, alkenyl, aryl) and 1-6% peroxide, adjusted to pH 6-10. To 145 parts fatty acid mixture (>20% conjugated) containing 0.03% Zn octanoate at 75° was added 115 parts epoxy resin (epoxy equivalent 550). The mixture was heated at 240° with azeotropic distillation on H2O until the acid number was 5 mg KOH/g, diluted to 60% solids with BuOCH2CH2OH, and 165 parts solution was mixed with 1 part I (RCH2 = R1 = C17H35CO2CH2, R2 = C16H33) and, at 165-170° over 4 h, with styrene 53, methacrylic acid 17.5, and tert-Bu2O2 2 parts. After 2 h at 165-170° (acid number 50-65), BuOCH2CH2OH was added to 70% solids and the pH was adjusted to 8-9 with Et3N to give a water-thinnable enamel.

L8 ANSWER 53 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1987:67171 HCAPLUS  
 DOCUMENT NUMBER: 106:67171  
 ORIGINAL REFERENCE NO.: 106:11043a,11046a  
 TITLE: On the synthesis of ω-bromo-fatty acid derivatives from internal unsaturated acids  
 AUTHOR(S): Alvhaell, Joergen; Gronowitz, Salo; Hallberg, Anders  
 CORPORATE SOURCE: Div. Org. Chem. 1, Univ. Lund, Lund, S-221 00, Swed.  
 SOURCE: Chemica Scripta (1985), 25(4), 393-7  
 CODEN: CSRPB9; ISSN: 0004-2056  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

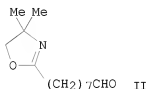
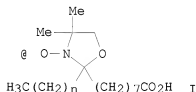
OTHER SOURCE(S): CASREACT 106:67171  
GI



I

AB The influence of solvents and modification of the protecting group on the hydrosilyrconation of unsatd. fatty acid derivs., including those of oleic acid and erucic acid, was studied. Reaction of the hydrosilyrconated 4,4-dimethyl-2-oxazolines with Br gave  $\omega$ -bromo-fatty acid 4,4-dimethyl-2-oxazolines e.g. I, in 22-51% yield, together with about 10% of the 4,4-dimethyl-2-oxazolines of the corresponding  $\alpha,\beta$ -unsatd. fatty acids.

L8 ANSWER 54 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1986:442687 HCAPLUS  
DOCUMENT NUMBER: 105:42687  
ORIGINAL REFERENCE NO.: 105:7073a,7076a  
TITLE: Synthesis of 9-doxyl derivatives of long-chain alkanolic acids  
AUTHOR(S): Misharin, A. Yu.; Bushmakina, N. G.  
CORPORATE SOURCE: USSR Cardiol. Res. Cent., Moscow, USSR  
SOURCE: Synthesis (1985), (6-7), 656-9  
CODEN: SYNTBF; ISSN: 0039-7881  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 105:42687  
GI

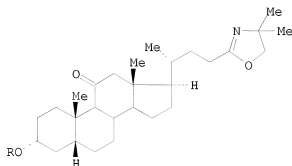


AB Title compds. I ( $n = 2,4,6$ ) were synthesized in 9 steps starting from oleic acid. Intermediates, e.g. II and  $\text{H}_3\text{C}(\text{CH}_2)_n\text{CO}(\text{CH}_2)_7\text{CO}_2\text{Me}$ , were characterized.

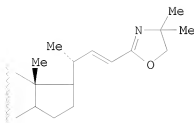
L8 ANSWER 55 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1986:186706 HCAPLUS  
DOCUMENT NUMBER: 104:186706  
ORIGINAL REFERENCE NO.: 104:29573a,29576a  
TITLE: An efficient and short degradation of the cholic acid side chain: a new method for the preparation and dehydrogenation of 4,5-dihydrooxazoles  
AUTHOR(S): Barton, Derek H. R.; Motherwell, William B.; Wozniak, Jocelyne; Zard, Samir Z.  
CORPORATE SOURCE: Inst. Chim. Subst. Nat., Gif-sur-Yvette, 91190, Fr.  
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (

1985), (9), 1865-9  
CODEN: JCPRB4; ISSN: 0300-922X  
Journal  
English  
CASREACT 104:186706

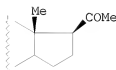
DOCUMENT TYPE:  
LANGUAGE:  
OTHER SOURCE(S):  
GI



I



II



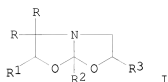
III

AB 11-Oxolithocholic acid condensed with HOCH<sub>2</sub>CMe<sub>2</sub>NH<sub>2</sub> in refluxing xylene containing boric acid to give 96% dihydrooxazole derivative I (R = H), which was treated with PhSeO<sub>2</sub>H in THF-pyridine to give the unsatd. derivative II (R = H) in 100% yield. Acylation of II (R = Ac) by COCl<sub>2</sub> in PhMe and subsequent ozonolysis in CH<sub>2</sub>Cl<sub>2</sub> gave the ketone III in 90-95% yields. Dihydrooxazole derivs. of isovaleric acid, Ph<sub>2</sub>CHCH<sub>2</sub>CO<sub>2</sub>H, palmitic acid, undec-10-enoic acid, and cyclohexanecarboxylic acid were prepared analogously in 44-97% yields. The side chain in I (R = H, Ac) was also cleaved in a one-step procedure by PhSeO<sub>2</sub>H, but the yields were low.

L8 ANSWER 56 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1986:130472 HCAPLUS  
DOCUMENT NUMBER: 104:130472  
ORIGINAL REFERENCE NO.: 104:20661a, 20664a  
TITLE: Polymers of polyisocyanates, bicyclic amide acetals and oxazolines  
INVENTOR(S): Goel, Anil B.  
PATENT ASSIGNEE(S): Ashland Oil, Inc., USA  
SOURCE: U.S., 5 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4558114	A	19851210	US 1985-693953	19850123 <--
PRIORITY APPLN. INFO.:			US 1985-693953	19850123





AB Copolymers of the amins I (R, R1, R3 = H, C1-18 alkyl; R2 = C1-18 alkyl or C7-20 arylalkyl), oxazolines, and polyisocyanates are impact-resistant and useful in reaction-injection molding. Thus, heating I (R2 = Me, R, R1, R3 = H) 32.5, undecyl-4,4-dimethyl-2-oxazoline 32, and MDI 115 parts between glass plates at 100° for 1 h and postcuring at 130° for 2 h gave a polymer with notched Izod impact strength 0.64 ft-lb/in. and heat distortion temperature 133°.

L8 ANSWER 57 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1985:166893 HCAPLUS

DOCUMENT NUMBER: 102:166893

ORIGINAL REFERENCE NO.: 102:26245a,26248a

TITLE: Hydrozirconation of unsaturated fatty acid derivatives

AUTHOR(S): Alvhaell, J.; Gronowitz, S.; Hallberg, A.; Svenson, R.  
Chem. Cent., Univ. Lund, Lund, S-220 07/7, Swed.

CORPORATE SOURCE: JAACS, J. Am. Oil Chem. Soc. (1984), 61(2),

SOURCE: 430-6

CODEN: JJASDH

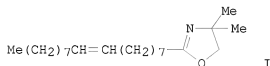
DOCUMENT TYPE: Journal

LANGUAGE: English

AB In the hydrozirconation reaction, developed by Schwartz and coworkers (1976), Cp2Zr(H)Cl (Cp = cyclopentadienyl)(I) is added to the double bond of an olefin. The organozirconium intermediate can be functionalized by reaction with a variety of electrophiles such as oxygen, halogens, acetyl chloride, and carbon monoxide. Furthermore, the double bond can be reformed by treatment with a hydride acceptor such as Ph3C+ BF4-. When a short-chain internal olefin is hydrozirconated, the initially formed alkylzirconium intermediate is rapidly isomerized to a compound in which the zirconium moiety is bound to the sterically least hindered position, which most often is the terminal position. The isomerization occurs rapidly at room temperature in contrast to the corresponding organoboron or aluminum compds., which slowly positionally rearrange only at elevated temps. Because of the facile isomerization of internal alkylzirconium compds. to the terminal ones, the application of the reaction to unsatd. fatty acids such as oleic and erucic acids was investigated. However, reactions on long-chain alkenes (such as oleic acid) are frequently much slower than those conducted on shorter-chain alkenes, and attention must be given on optimizing the reaction conditions if good yields are to be obtained. It would also be necessary to find an easily removable protecting group for the carboxylic function, as I reduces carboxylic acids to alcs. The 4,4-dimethyl-2-oxazoline function is a suitable protecting group, and therefore the oxazolines were synthesized from oleic acid and erucic acid. Hydrozirconation of the 4,4-dimethyl-2-oxazoline of oleic acid followed by oxidation with tert-Bu hydroperoxide and conversion to Me esters, gave Me 3-hydroxy- and Me 18-hydroxystearate in 13% and 17% yield, resp. The relatively low yields is due to competing hydrogenation, the mechanism of which is discussed. Recent results indicate that the carboxyl group can be protected as tert-Bu esters in the hydrozirconation and that oleyl alc.

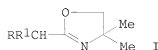
derivs. can also be used. To understand the isomerization pattern in hydrozirconation, the reaction with  $\alpha,\beta$ - and  $\beta,\gamma$ -unsatd. fatty acid oxazolines is discussed. Possibilities of making the hydrozirconation reaction catalytic by binding of the hydrozirconation reagent to a solid support as well as the synthetic potential in combining hydrozirconation with the olefin metathesis reaction are briefly reviewed.

L8 ANSWER 58 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1984:630387 HCAPLUS  
 DOCUMENT NUMBER: 101:230387  
 ORIGINAL REFERENCE NO.: 101:34985a,34988a  
 TITLE: Hydrozirconation of oleic acid oxazoline followed by reaction with deuterium oxide  
 AUTHOR(S): Alvhæll, Joergen; Gronowitz, Salo; Hallberg, Anders; Svenson, Rolf  
 CORPORATE SOURCE: Chem. Cent., Univ. Lund, Lund, S-220 07, Swed.  
 SOURCE: Chemica Scripta (1984), 23(4), 207-8  
 CODEN: CSRFB9; ISSN: 0004-2056  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 101:230387  
 GI



AB Hydrozirconation of the 2-oxazoline I followed by deuteration gave the 2-, 3- and 18-deuterio derivs. of stearic acid oxazoline in the ratio 1.5:1.0:3.3, as determined by <sup>1</sup>H NMR spectra. The 2-zirconium intermediate had previously not been detected, since it failed to give the 2-hydroxy derivative upon oxidation

L8 ANSWER 59 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1984:156203 HCAPLUS  
 DOCUMENT NUMBER: 100:156203  
 ORIGINAL REFERENCE NO.: 100:23791a,23794a  
 TITLE: Synthesis of 2-alkyl branched long-chain fatty acids and monoacyl glycerols  
 AUTHOR(S): Hersloef, Margareta; Gronowitz, Salo  
 CORPORATE SOURCE: Chem. Cent., Univ. Lund, Lund, S-220 07, Swed.  
 SOURCE: Chemica Scripta (1983), 22(5), 230-5  
 CODEN: CSRFB9; ISSN: 0004-2056  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 100:156203  
 GI



AB In connection with attempts to prepare new additives for metal-working

fluids from renewable resources, the  $\alpha$ -alkylation of oxazolines of long-chain fatty acids has been investigated in detail. Thus, RCH<sub>2</sub>CO<sub>2</sub>H [R = Me(CH<sub>2</sub>)<sub>9</sub>, Bu, Me(CH<sub>2</sub>)<sub>15</sub>] were converted to oxazolines with H<sub>2</sub>NCMe<sub>2</sub>CH<sub>2</sub>OH and were alkylated to give I [R<sub>1</sub> = Me(CH<sub>2</sub>)<sub>9</sub>, Me(CH<sub>2</sub>)<sub>15</sub>, Bu]. Hydrolysis of I gave RR1CHCO<sub>2</sub>H which were esterified with isopropylideneglycerol, followed by ketal cleavage to give RR1CHCO<sub>2</sub>CH<sub>2</sub>CH(OH)CH<sub>2</sub>OH.

L8 ANSWER 60 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 1984:141088 HCAPLUS

DOCUMENT NUMBER: 100:141088

ORIGINAL REFERENCE NO.: 100:21541a,21544a

TITLE: Sizing paper with anionic, hydrophobic sizing agents and cationic retention agents

INVENTOR(S): Topfl, Rosemarie; Bernheim, Michael; Meindl, Hubert; Wegmuller, Hans; Rohringer, Peter; Werthemann, Dieter

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Eur. Pat. Appl., 165 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
EP 96654	A2	19831221	EP 1983-810216	19830520 <--
EP 96654	A3	19841114		
EP 96654	B1	19871028		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
AT 30444	T	19871115	AT 1983-810216	19830520 <--
FI 8301864	A	19831129	FI 1983-1864	19830525 <--
FI 79579	B	19890929		
FI 79579	C	19900110		
AU 8315007	A	19831208	AU 1983-15007	19830526 <--
AU 571440	B2	19880421		
CA 1249272	A1	19890124	CA 1983-428999	19830526 <--
DK 8302382	A	19831129	DK 1983-2382	19830527 <--
DK 171081	B1	19960528		
NO 8301900	A	19831129	NO 1983-1900	19830527 <--
ZA 8303858	A	19840125	ZA 1983-3858	19830527 <--
ES 522759	A1	19850601	ES 1983-522759	19830527 <--
JP 59021797	A	19840203	JP 1983-93400	19830528 <--
JP 07056119	B	19950614		
US 5201998	A	19930413	US 1990-486679	19900228 <--
JP 06093590	A	19940405	JP 1991-356120	19911128 <--

PRIORITY APPLN. INFO.:

CH 1982-3315	A	19820528
CH 1983-1060	A	19830225
CH 1983-1754	A	19830330
CH 1983-1755	A	19830330
CH 1983-1756	A	19830330
EP 1983-810216	A	19830520
US 1983-497461	B1	19830523
US 1986-860375	B1	19860506
US 1988-257132	B1	19881007

AB Amides and esters were prepared and used in sizing of paper and paperboard, in combination with cationic retention agent. Thus, aqueous cellulose pulp suspension (consistency 0.5%) containing chalk 20, cationic polyacrylamide 0.01, nitrilotriethyl distearate sulfate [89290-50-6] 7, and polyethylenimine [9002-98-6] 3.5% on the basis of dry pulp was formed into sheet, dried for 3 min at 130° and heat-treated for 3 min at 140° to give a specimen with 80 g/m<sup>2</sup> surface weight and 16 g/m<sup>2</sup> sieve side Cobb value.

L8 ANSWER 61 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1984:82119 HCAPLUS  
 DOCUMENT NUMBER: 100:82119  
 ORIGINAL REFERENCE NO.: 100:12407a,12410a  
 TITLE: Synthesis and evaluation of radioiodinated terminal  
 para-iodophenyl-substituted  $\alpha$ - and  
 $\beta$ -methyl-branched fatty acids  
 AUTHOR(S): Goodman, M. M.; Kirsch, G.; Knapp, F. F., Jr.  
 CORPORATE SOURCE: Health Saf. Res. Div., Oak Ridge Natl. Lab., Oak  
 Ridge, TN, 37830, USA  
 SOURCE: Journal of Medicinal Chemistry (1984),  
 27(3), 390-7  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Methods have been developed for the preparation of terminal  
 p-iodophenyl-substituted  $\alpha$ - and  $\beta$ -methyl-branched long-chain  
 fatty acids. The syntheses and phys. properties of 14-(p-iodophenyl)-  
 2(RS)-methyltetradecanoic acid and 15-(p-iodophenyl)-3(RS)-  
 methylpentadecanoic acid are described. The radioiodinated agents are of  
 interest as a result of the expected pronounced uptake and prolonged  
 myocardial retention that may result from the inhibition of fatty acid  
 metabolism. Tissue distribution studies in rats with 14-(p-[125I]iodophenyl)-  
 3(RS)-methylpentadecanoic acid show significant heart uptake and prolonged  
 retention accompanied by low in vivo deiodination and high blood levels.  
 A comparison of the heart uptake of the radioiodinated methyl-branched  
 fatty acids and their unbranched analogs has demonstrated a greater  
 myocardial retention of the methyl-branched fatty acids than the  
 unbranched analogs. These results suggest that the mechanism of  
 myocardial retention results from steric or chemical inhibition of the  
 metabolism  
 of these fatty acids by the presence of the Me group.

L8 ANSWER 62 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1983:559847 HCAPLUS  
 DOCUMENT NUMBER: 99:159847  
 ORIGINAL REFERENCE NO.: 99:24511a,24514a  
 TITLE: Spandex fibers resistant to hydrolysis and  
 discoloration with gases  
 PATENT ASSIGNEE(S): Toyobo Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58037051	A	19830304	JP 1981-135149	19810827 <--
JP 02050952	B	19901105		

PRIORITY APPLN. INFO.: JP 1981-135149 19810827

AB A polyester-polyurethane composition with improved resistance to hydrolysis and  
 discoloration with gases (e.g., from combustion of hydrocarbons) comprises  
 a 2-C1-30 alkyl-4,4-disubstituted-2-oxazoline. Thus, a mixture of adipic  
 acid 292, 1,4-butanediol 180, and ethylene glycol 124 parts was heated 2 h  
 at 210° in a N atmospheric, treated with 0.02 part (NH4)2TiO(C2O4)2 and  
 0.025 part (PhO)3P, evacuated gradually to 0.2 mm at 210°, and  
 heated 2 h to give a copolymer (m.p. 32-35°) with OH-group content  
 680 equiv/106 g and CO2-group content 4.8 equiv/106 g. A mixture of 100  
 parts of the copolymer and 21.4 parts diphenylmethane 4,4'-diisocyanate

was treated with 80 parts AcNMe2 with stirring, heated 1 h at 50°, treated with 220 parts AcNMe2, cooled to 10°, and treated gradually with a solution of 3.2 parts 1,2-diaminopropane in 30 parts AcNMe2 to give a polyester-polyurethane [79347-35-6] solution. The solution was treated with a polymer [87457-25-8] solution (A) prepared by heating 0.5 h at 60° a mixture of 80 parts 4,4'-dicyclohexylmethane diisocyanate, 138 parts AcNMe2, and 58 parts 2-methyl-4,4-dimethylol-2-oxazoline, which was produced from a 60:51 (by weight) H2NC(CH2OH)3-Ac2O mixture in AcOH, to give a 3% solution

(on

solids), which was processed to give 55-denier polyurethane fibers. The fibers showed initial (after 7 days immersion in water at 80°) tensile strength 63.5 (42.3) g and resistance to discoloration by JIS L 0855-1976 (3 units, b value difference) 9.3, compared with 60.5 (18.2) g and 21.3, resp., when A was omitted.

L8 ANSWER 63 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1983:193953 HCAPLUS

DOCUMENT NUMBER: 98:193953

ORIGINAL REFERENCE NO.: 98:29388h,29389a

TITLE: Synthesis of charged amphipathic nitroxide lipid spin labels and an example of their application in membrane studies

AUTHOR(S): Keana, John F. W.; Boyd, Steven A.; McMillen, Debra A.; Bernard, Edward M.; Jost, Patricia C.

CORPORATE SOURCE: Inst. Mol. Biol., Univ. Oregon, Eugene, OR, 97403, USA

SOURCE: Chemistry and Physics of Lipids (1982), 31(4), 339-49

CODEN: CPLIA4; ISSN: 0009-3084

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The synthesis of a series of amphipathic nitroxide lipid spin labels is reported. Thus, 12-proxylhexadecanol was converted into the versatile fatty acid spin label 14-proxylstearic acid. This substance was used to prepare 14-proxylstearyltrimethylammonium methanesulfonate, a pos. charged label, and 14-proxylstearyltrimethyl phosphate sodium salt, a neg. charged label. Also prepared in the doxyl series were quaternary ammonium salts derived from 16-doxyl- and 7-doxylstearic acid. The pos. charged and neg. charged proxyl labels were used in a preliminary experiment to investigate the role of charge in their interaction with reconstituted cytochrome oxidase. The average binding affinity of the neg. charged label is .apprx.2-fold higher than that of the pos. charged label at pH 7.4. At pH 5.5 the average relative affinity for neg. charged label is .apprx.3.5-fold higher than that of pos. charged label, suggesting that the ionizable group(s) on the protein can interact with the lipid headgroup.

L8 ANSWER 64 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:104004 HCAPLUS

DOCUMENT NUMBER: 96:104004

ORIGINAL REFERENCE NO.: 96:17073a,17076a

TITLE: Synthesis of diamagnetic structural analogs of representative doxyl, proxyl, piperidine, and pyrroline nitroxide spin labels

AUTHOR(S): Keana, John F. W.; Seyedrezai, Seyed E.

CORPORATE SOURCE: Dep. Chem., Univ. Oregon, Eugene, OR, 97403, USA

SOURCE: Journal of Organic Chemistry (1982), 47(2), 347-52

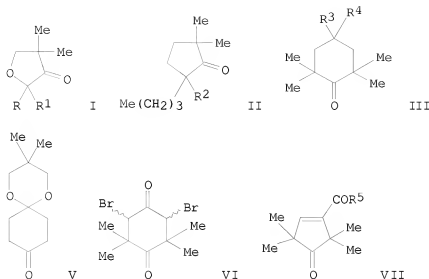
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 96:104004

GI



AB Diamagnetic structural analogs of doxyl, proxyl, piperidine, and pyrrolidine nitroxide spin labels were prepared. The analog design was based on the observation that a nitroxide group is similar both in size and polarity to a carbonyl group of a ketone. Diamagnetic doxyl nitroxide analogs I [R, R1 = Bu, Et; hexyl, (CH2)10CO2H] were prepared by a series of reactions which utilized the addition of MeOC(Li):C:CH2 to the appropriate ketone as the key step. Diamagnetic proxyl nitroxide analog II [R2 = (CH2)12CO2H] of 14-proxylstearic acid was obtained from keto ester II (R2 = CO2Me) in 8 steps. The diamagnetic piperidine nitroxide analogs III [R3R4 = O (IV); R3 = H, R4 = OH] were prepared from keto ketal V. Dibromination of IV gave VI, which served as the precursor for diamagnetic pyrroline nitroxide analogs VII (R5 = NH2, OH, OMe) through application of a Favorski ring contraction reaction sequence.

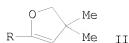
L8 ANSWER 65 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:103661 HCAPLUS  
DOCUMENT NUMBER: 96:103661  
ORIGINAL REFERENCE NO.: 96:17009a,17012a  
TITLE:  $\alpha$ -Substituted acrylic acids  
INVENTOR(S): Serota, Samuel; Linfield, Warner M.  
PATENT ASSIGNEE(S): United States Dept. of Agriculture, USA  
SOURCE: U. S. Pat. Appl., 17 pp. Avail. NTIS Order No. PAT-APPL-236 084.  
CODEN: XAXXAV

DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 236084	A0	19811106	US 1981-236084	19810220 <--
US 4477384	A	19841016		
PRIORITY APPLN. INFO.:			US 1981-236084	19810220
OTHER SOURCE(S):	MARPAT	96:103661		

GI



AB Title compds. were prepared by condensing a fatty acid with  $\text{Me}_2\text{C}(\text{NH}_2)\text{CH}_2\text{OH}$  (I). Thus, heating palmitic acid with I for 8.5 h at  $105^\circ$  gave II [R =  $\text{Me}(\text{CH}_2)_{14}$ ] which was refluxed with formaldehyde to give 84% II [R =  $\text{Me}(\text{CH}_2)_{13}\text{C}(\text{:CH}_2)$ ] which was then hydrolyzed to give  $\text{Me}(\text{CH}_2)_{13}\text{C}(\text{:CH}_2)\text{CO}_2\text{H}$ .

L8 ANSWER 66 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1981:549895 HCAPLUS  
 DOCUMENT NUMBER: 95:149895  
 ORIGINAL REFERENCE NO.: 95:25075a,25078a  
 TITLE: Novel synthesis of  $\alpha$ -substituted acrylic acids  
 AUTHOR(S): Serota, S.; Simon, J. R.; Murray, E. B.; Linfield, W. M.  
 CORPORATE SOURCE: Dep. Agric., East. Reg. Res. Cent., Philadelphia, PA, 19118, USA  
 SOURCE: Journal of Organic Chemistry (1981), 46(21), 4147-51  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 95:149895

AB  $\alpha$ -Substituted acrylic acids were prepared by condensing a carboxylic acid having no  $\alpha$ -substituents with  $\text{H}_2\text{NCMe}_2\text{CH}_2\text{OH}$  to form the corresponding oxazoline, which reacted readily with paraformaldehyde to give an intermediate mixture of mono- and dimethylol derivs., which upon heating forms the  $\alpha$ -methylene derivative of the oxazoline. The latter, upon acid hydrolysis, yields the  $\alpha$ -substituted acrylic acid generally in an overall yield of above 70% and the acids are usually at least 95% pure.

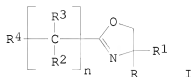
L8 ANSWER 67 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1981:444183 HCAPLUS  
 DOCUMENT NUMBER: 95:44183  
 ORIGINAL REFERENCE NO.: 95:7567a,7570a  
 TITLE: 2-Oxazoline derivatives and antioxidant compositions containing them  
 INVENTOR(S): Wheeler, Edward L.; Jancis, Elmar H.; Gencarelli, Richard A.; Barrows, Franklin H.  
 PATENT ASSIGNEE(S): Uniroyal, Inc., USA  
 SOURCE: Braz. Pedido PI, 57 pp.  
 CODEN: BPXXDX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Portuguese  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BR 7904998	A	19800129	BR 1979-4998	19790308 <--
BR 7904999	A	19800212	BR 1979-4999	19790803 <--
ZA 7904012	A	19800827	ZA 1979-4012	19790803 <--
DD 148232	A5	19810513	DD 1979-214795	19790803 <--
ZA 7904013	A	19810624	ZA 1979-4013	19790803 <--
CS 227302	B2	19840416	CS 1979-5369	19790803 <--
AT 11777	T	19850215	AT 1979-301562	19790803 <--

PRIORITY APPLN. INFO.:

US 1978-931087	A 19780804
US 1979-43787	A 19790530
US 1979-931087	A 19790530
EP 1979-301562	A 19790803

GI



AB Oxazolines I (R, R1 = H, C1-4 alkyl, CH2OH, CH2O2CR5; R2 = C1-4 alkyl, CH2OH, CH2O2CR5; R3 = CH2OH, CH2O2CR5; R4, R5 = H, C1-30 alkyl, C4-8 cycloalkyl, C6-10 aryl; n = 0, 1; R or R4 may be a divalent connecting group) in which the mol. contains  $\geq 1$  3,5-di-tert-butyl-4-hydroxybenzoyl group are prepared and used as antioxidants for polypropylene [9003-07-0] or EPDM. Thus, 1 mol H2NC(CH2OH)3 [77-86-1] was condensed with 0.5 mol 3,3'-thiodipropionic acid [111-17-1] by refluxing in xylene to give 2,2'-(thiodiethylene)bis[4,4-bis(hydroxymethyl)-2-oxazoline [75152-29-3], which (0.1 mol) was esterified with 0.4 mol 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionic acid to give the tetraester (II) [77924-43-7]. Bottles molded from Profax 6501 containing 0.1% II were resistant to aging for 41 days at 149° in an air-circulating oven, compared with 1 day for polypropylene bottles not containing II.

L8 ANSWER 68 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1981:409753 HCAPLUS  
 DOCUMENT NUMBER: 95:9753  
 ORIGINAL REFERENCE NO.: 95:1785a,1788a  
 TITLE: Phosphorus-containing compounds and lubricants containing them  
 INVENTOR(S): Horodysky, Andrew G.; Gemmill, Robert M., Jr.  
 PATENT ASSIGNEE(S): Mobil Oil Corp., USA  
 SOURCE: U.S., 6 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4253973	A	19810303	US 1979-96115	19791120 <--
PRIORITY APPLN. INFO.:			US 1979-96115	A 19791120

AB Reaction of (hydroxymethyl)heptadecenylloxazoline monooleate (I) [77617-82-4] with P255 and treatment of the product with an aliphatic amine or a vinyl monomer gave lubricating agents useful at 4 weight% treating levels in automobile lubricating oils. I was manufactured by reaction of oleic acid [112-80-1] with Tris [77-86-1] in xylene.

L8 ANSWER 69 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1981:211344 HCAPLUS  
 DOCUMENT NUMBER: 94:211344  
 ORIGINAL REFERENCE NO.: 94:34555a,34558a  
 TITLE: Bisoxazolines as additives useful in oleaginous compositions  
 INVENTOR(S): Ryer, Jack; Zielinski, James; Miller, Harold N.; Brois, Stanley J.



PATENT ASSIGNEE(S): Exxon Research and Engineering Co., USA  
 SOURCE: Can., 20 pp.  
 CODEN: CAXXA4  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

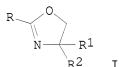
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 1092089	A1	19801223	CA 1977-286629	19770913 <--
PRIORITY APPLN. INFO.:			CA 1977-286629	A 19770913

AB Gasoline corrosion inhibitors and lubricating oil dispersants are prepared by treating hydrocarbyl dicarboxylic acid with a 2,2-disubstituted-2-amino-1-alkanol to form bisoxazolines. Thus, when 0-024 weight% of an bisoxazoline [77621-65-9], prepared by treating 2-octadecenylsuccinic anhydride [67066-88-0] with tris(hydroxymethyl)aminomethane [77-86-1] in presence of Zn acetate catalyst, was used in gasoline no rust formation was observed in the ASTM D-665 M rust test.

L8 ANSWER 70 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1980:587284 HCAPLUS  
 DOCUMENT NUMBER: 93:187284  
 ORIGINAL REFERENCE NO.: 93:29875a,29878a  
 TITLE: 2-Oxazoline derivatives useful as antioxidants  
 INVENTOR(S): Wheeler, Edward Lockwood; Jancis, Elmar Harry; Gencarelli, Richard Anthony; Barrows, Franklin Herbert  
 PATENT ASSIGNEE(S): Uniroyal, Inc., USA  
 SOURCE: Braz. Pedido PI, 57 pp.  
 CODEN: BPXXDX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Portuguese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BR 7904998		19800129	BR 1979-4998	19790803 <--
PRIORITY APPLN. INFO.:			US 1978-931087	19780804

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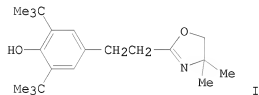
AB Oxazoline derivs. (I; R = optionally substituted alkyl, aryl, or aralkyl; R1 = lower alkyl, acyloxymethyl; R2 = lower alkyl, CH2OH, or acyloxymethyl; ≥1 3,5-di-tert-butyl-4-hydroxybenzyl group is present) are prepared and used as antioxidants for polypropylene [9003-07-0] or EPDM. Thus, equimolar ams. of benzoic acid [65-85-0] and H2NC(CH2OH)3 [77-86-1] were heated in refluxing xylene with azeotropic removal of water to give 4,4-bis(hydroxymethyl)-2-phenyl-2-oxazoline (I, R = Ph, R1 = R2 = CH2OH) [62203-32-1], which was esterified to give I [R = Ph, R1 = R2 = CH2O2CCH2CH2C6H2(CMe3)2OH-3,5,4] (II) [75182-65-9]. Profax 6501 was compounded with 0.1 phr II and 0.25 phr distearyl thiodipropionate, pressed into a 1.9-mm film, and cut into buttons which became friable after 133 days in a circulating air oven at 149°.

compared with 4 days when II was omitted. Similarly, 17 other antioxidants of structure I were prepared

L8 ANSWER 71 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN  
 ACCESSION NUMBER: 1980:586329 HCAPLUS  
 DOCUMENT NUMBER: 93:186329  
 ORIGINAL REFERENCE NO.: 93:29706h,29707a  
 TITLE: 2-Oxazoline derivatives  
 PATENT ASSIGNEE(S): Uniroyal, Inc., USA  
 SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 55043080	A	19800326	JP 1979-99391	19790803 <--
JP 61029348	B	19860705		
CA 1133908	A1	19821019	CA 1979-332538	19790725 <--
AU 7949559	A	19800207	AU 1979-49559	19790803 <--
AU 522316	B2	19820527		
EP 8507	A1	19800305	EP 1979-301562	19790803 <--
EP 8507	B1	19850213		
R: AT, BE, CH, DE, FR, GB, IT, NL				
DD 146232	A5	19810513	DD 1979-214795	19790803 <--
RO 78012	A1	19811225	RO 1979-98352	19790803 <--
AT 11777	T	19850215	AT 1979-301562	19790803 <--
PRIORITY APPLN. INFO.:				
		US 1978-931087	A	19780804
		US 1979-43787	A	19790530
		US 1979-931087	A	19790530
		EP 1979-301562	A	19790803

GI



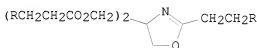
AB 2-Oxazoline derivs., e.g. I, were prepared and useful as antioxidants for polymers. Thus, a mixture of 0.5 mol 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionic acid and 0.5 mol Me2C(NH2)CH2OH in xylene was refluxed 20 h with H2O removal to give I. Similarly prepared were 33 addnl. oxazoline derivs.

L8 ANSWER 72 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN  
 ACCESSION NUMBER: 1980:447819 HCAPLUS  
 DOCUMENT NUMBER: 93:47819  
 ORIGINAL REFERENCE NO.: 93:7923a,7926a  
 TITLE: Substituted oxazolines  
 INVENTOR(S): Zesterman, Mary J.; Hussar, John F.  
 PATENT ASSIGNEE(S): Cincinnati Milacron Chemicals, Inc., USA  
 SOURCE: Belg., 30 pp.  
 CODEN: BEXXAL  
 DOCUMENT TYPE: Patent

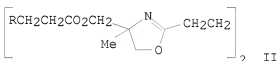
LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 878550	A1	19791217	BE 1979-196978	19790831 <--
US 4205176	A	19800527	US 1978-952492	19781018 <--
AU 7947472	A	19800508	AU 1979-47472	19790528 <--
AU 515167	B2	19810319		
NL 7905001	A	19800422	NL 1979-5001	19790627 <--
CA 1122988	A1	19820504	CA 1979-330738	19790627 <--
JP 55055172	A	19800422	JP 1979-92505	19790720 <--
DE 2929341	A1	19800424	DE 1979-2929341	19790720 <--
FR 2439190	A1	19800516	FR 1979-20302	19790808 <--
GB 2031891	A	19800430	GB 1979-33963	19791001 <--
US 4288361	A	19810908	US 1979-93030	19791109 <--
PRIORITY APPLN. INFO.:			US 1978-952492	A 19781018

GI



I



II

AB Compound I [74217-69-9] and compound II [74217-75-7] with R = 3,5-di-tert-butyl-4-hydroxyphenyl, as well as 9 similar compds., are prepared and used as antioxidants for organic compds. such polyolefins, PVC [9002-86-2], styrene polymers, and diisooctyl azelate [26544-17-2]. Thus, 3-(3,5-di-tert-butyl-4-hydroxyphenyl) propionic acid [20170-32-5] and H2NC(CH2OH)3 [77-86-1] were used to prepare I which was mixed (0.05%) with polypropylene [9003-07-0] containing 0.15% distearyl thiodipropionate. The mixture was stable for 1416 h at 150° in air.

L8 ANSWER 73 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN  
 ACCESSION NUMBER: 1980:59712 HCAPLUS  
 DOCUMENT NUMBER: 92:59712  
 ORIGINAL REFERENCE NO.: 92:9901a,9904a  
 TITLE: Organic heat-sensitive materials  
 INVENTOR(S): Kobayashi, Toshio; Mitomo, Akio  
 PATENT ASSIGNEE(S): Hitachi Heating Appliances Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54103792	A	19790815	JP 1978-10699	19780202 <--
PRIORITY APPLN. INFO.:			JP 1978-10699	A 19780202

AB Nylon 11 [25035-04-5] was mixed with 4-bis(hydroxymethyl)-2-heptadecyloxazoline (I) [14466-50-3] or a similar compound to

prepare heat-sensitive materials for controlling the temperature of elec.  
blankets. Thus, the impedance-temperature curve for nylon 11 containing 3% I  
showed  
little change after 500 h at 35 V (d.c.) and 100°.

L8 ANSWER 74 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1980:8750 HCAPLUS  
DOCUMENT NUMBER: 92:8750  
ORIGINAL REFERENCE NO.: 92:1563a,1566a  
TITLE: Solubilized borates of bis-oxazoline and lubricant  
compositions  
INVENTOR(S): Bridger, Robert F.  
PATENT ASSIGNEE(S): Mobil Oil Corp., USA  
SOURCE: U.S., 5 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 4162224	A	19790724	US 1977-763736	19770128 <--
PRIORITY APPLN. INFO.:			US 1977-763736	A 19770128
AB	The preparation and use of new oil-soluble antiwear and antioxidant lubricating oil additives from the reaction of an alkyloxazoline, H3BO3, and a substituted PhOH are described. Thus, octadecyl-2,2'-ethylenebis[4,4'-bis(hydroxymethyl)oxazoline] 19.98, H3BO3 4.57, and 2.6-di-tert-butyl-4-methylphenol 16.28 g were refluxed in PhMe for 118 h to yield 32.6 g product containing 2.1% B. The antioxidant efficiency (O inhibition, time required for the absorption of 1 mol of O per kg sample) at 0.5 weight% concentration and antiwear efficiency (wear scar diameter) at 2 weight% concentration were 21.9 h and 0.4775 mm, resp., vs. 1.1 and 0.6858 for the base oil alone.			

L8 ANSWER 75 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1979:153592 HCAPLUS  
DOCUMENT NUMBER: 90:153592  
ORIGINAL REFERENCE NO.: 90:24431a,24434a  
TITLE: Chromogenic hot melt coating compositions  
INVENTOR(S): Davis, Gerald T.; Schwab, Gerhart; Shackle, Dale R.  
PATENT ASSIGNEE(S): Mead Corp., USA  
SOURCE: U.S., 11 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 9  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 4139392	A	19790213	US 1977-828535	19770829 <--
US 4143890	A	19790313	US 1976-747682	19761206 <--
PRIORITY APPLN. INFO.:			US 1976-684459	A2 19760507
			US 1976-747682	A3 19761206
AB	Hot-melt coating for pressure-sensitive copying paper comprised microencapsulated chromogenic materials dispersed in waxes. Thus, 60 g oxazoline wax (TS 254AA [14466-50-3]) was melted at 210-20° F, an aspirator connected to reduce the pressure to 26 mm, and an aqueous hydroxypropyl cellulose [9004-64-2] microcapsule slurry (60.5 g, dry weight) added over several hours while water was removed. The hot-melt dispersion had viscosity .apprx.400 cP at 85° C and was			

easily applied to paper with a heated Mayer bar. The coated sheet appeared smooth and white with a slightly waxy feel and marked well when tested against a novolak coated record sheet.

L8 ANSWER 76 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1978:11745 HCAPLUS  
DOCUMENT NUMBER: 88:11745  
ORIGINAL REFERENCE NO.: 88:1841a,1844a  
TITLE: Antiperspirant compositions containing metal-corrosion inhibitors  
PATENT ASSIGNEE(S): Risdon Mfg. Co., USA  
SOURCE: Fr. Demande, 20 pp.  
CODEN: FRXXBL  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

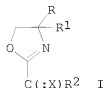
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2320729	A1	19770311	FR 1976-9397	19760331 <--
FR 2320729	B3	19781222		

PRIORITY APPLN. INFO.: FR 1976-9397 A 19760331  
AB Antiperspirant emulsions comprise an aqueous solution of an astringent metallic mineral salt, an anhydrous hydrophobic liquid vehicle, and a nonmetal-corrosive emulsifying agent. For example, an antiperspirant was prepared containing Al(OH)2Cl 12.0, deionized water 36.8, Emcol 14 [39403-38-8] 2.0, Brij 98 [9004-98-2] 0.2, Isopar E 8.5, starch powder 10.5, and propellant (16% propane and 84% isobutane) 30.0 weight%.

L8 ANSWER 77 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1977:595540 HCAPLUS  
DOCUMENT NUMBER: 87:195540  
ORIGINAL REFERENCE NO.: 87:30899a,30902a  
TITLE: Combatting microorganisms employing substituted oxazolines  
INVENTOR(S): Hunsucker, Jerry H.  
PATENT ASSIGNEE(S): IMC Chemical Group, Inc., USA  
SOURCE: U.S., 6 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4049819	A	19770920	US 1976-656486	19760209 <--

PRIORITY APPLN. INFO.: US 1976-656486 A 19760209  
GI



AB The title compds. I [R and R1 = Me, Et, HOCH2, and can be the same or

different; X = H2 or (HOCH2)2; R2 = C4-16 alkyl] are antimicrobials. Thus, 4,4-dimethyl-2-undecyl-2-oxazoline [46921-17-9] at <33 ppm effectively controlled such bacteria as *Bacillus subtilis*, *Staphylococcus aureus*, etc., and fungi such as *Cephalosporium* species, *Trichophyton mentagrophytes* etc.

L8 ANSWER 78 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1977:470800 HCAPLUS  
 DOCUMENT NUMBER: 87:70800  
 ORIGINAL REFERENCE NO.: 87:1126/a,11270a  
 TITLE: Lubricant compositions  
 INVENTOR(S): Bridger, Robert Frederick; Schmitt, Kirk Douglas  
 PATENT ASSIGNEE(S): Mobil Oil Corp., USA  
 SOURCE: Ger. Offen., 14 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2633930	A1	19770217	DE 1976-2633930	19760728 <--
US 4253982	A	19810303	US 1975-600984	19750801 <--
ZA 7604395	A	19780329	ZA 1976-4395	19760722 <--
NL 7608337	A	19770203	NL 1976-8337	19760727 <--
BE 844616	A1	19770128	BE 1976-169328	19760728 <--
JP 52018704	A	19770212	JP 1976-89270	19760728 <--
FR 2319703	A1	19770225	FR 1976-23045	19760728 <--
GB 1532833	A	19781122	GB 1976-31442	19760728 <--
AU 497274	B2	19781207	AU 1976-16419	19760730 <--

PRIORITY APPLN. INFO.: US 1975-600984 A 19750801  
 AB (C4-24-alkyl)ethylenebisoxazolines are noncorrosive antiwear additives for lubricants. Thus, 1,2-bis[4,4-bis(hydroxymethyl)-2-oxazolin-2-yl]docosane [63347-19-3] (from n-eicosylsuccinic anhydride [53520-66-4] and Tris [77-86-1] was added to a solvent-extracted paraffinic lubricating oil (viscosity 32 cSt at 99°) at 1.14 weight%. Results of the 4-ball test at 40 kg load, 600 rpm, and 30 min (friction coefficient, wear scar diameter, and wear rate given) were: for steel on steel at 204°, 0.0798, 0.4445 mm, 0.62 + 10-12 cm3/cm-k; for steel on bronze, 0.0669, 0.6858, and 1.92 X 10-12, resp., with no corrosion.

L8 ANSWER 79 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1976:593906 HCAPLUS  
 DOCUMENT NUMBER: 85:193906  
 ORIGINAL REFERENCE NO.: 85:31013a,31016a  
 TITLE: Corrosion prevention of brake cylinders  
 PATENT ASSIGNEE(S): General Tire and Rubber Co., USA  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 50075634	A	19750620	JP 1974-57389	19740523 <--
JP 55012057	B	19800329		
CA 1022331	A1	19771213	CA 1974-196800	19740404 <--

PRIORITY APPLN. INFO.: US 1973-412941 A 19731105

AB Substituted oxazoline compds. are compounded with rubber brake cups to prevent corrosion of brake cylinder metals. Thus, a composition of SBR 100, carbon black 40, ZnO 5, S 0.25, stearic acid 1.0, Santocure NS (accelerator) 1.0, AgeRite White (antioxidant) 1.5, DiCup 40C (dicumyl peroxide composition) 4.5, and Alkaterge T [2-alkyl-4,4-bis-(hydroxymethyl)-2-oxazoline](I) [28984-69-2] was molded 5 min at 350°F to give brake cups which were attached to cast iron cylinders containing oils. The cylinders passed a corrosion test (MIL C 14055 C).

L8 ANSWER 80 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1976:578904 HCAPLUS  
 DOCUMENT NUMBER: 85:178904  
 ORIGINAL REFERENCE NO.: 85:28593a,28596a  
 TITLE: Composition and process for dyeing glass textiles  
 INVENTOR(S): Hunsucker, Jerry H.  
 PATENT ASSIGNEE(S): Commercial Solvents Corp., USA  
 SOURCE: U.S., 5 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3967015	A	19760629	US 1974-457027	19740401 <--
PRIORITY APPLN. INFO.:			US 1972-296400	A2 19721010

GI



AB Noncrocking, dry-cleanable, dyed glass fiber fabrics were prepared by coating with 40 parts thermosetting epoxy resin containing 60 parts of a substituted oxazoline [I, R, R1 = Me, Et, hydroxymethyl, (octadecanoyloxy)methyl], curing at 270-300°F, and dyeing with a disperse, acid, or vat dye. Thus, a piece of glass cloth was immersed in a 50:50 mixture of a resin solution (Aquamac WX-363-M [60604-89-9] in isobutyl alc. mixed with an isobutyl alc. solution of melamine and dimethylethane) and a 15% emulsion of 4,4-bis(octadecanoyloxymethyl)-2-oxazoline (Wax TS-970) [60586-87-0], squeezed to remove the excess solution, and heated 15 min at 275°F. The treated cloth was then dyed 30-90 min at 205°F in 1500 parts of an aqueous dyebath containing Yellow WLS powder 5, NaH2PO4 20, CO-630 10, and octylphenol 2 parts. The dyed cloth did not crock and had an excellent hand.

L8 ANSWER 81 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1976:558173 HCAPLUS  
 DOCUMENT NUMBER: 85:158173  
 ORIGINAL REFERENCE NO.: 85:25323a,25326a  
 TITLE: Oxazoline wax-impregnated sausage skins  
 INVENTOR(S): O'Brien, Merrill N., Jr.  
 PATENT ASSIGNEE(S): Tee-Pak, Inc., USA  
 SOURCE: Ger. Offen., 21 pp.

DOCUMENT TYPE: CODEN: GWXXBX  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: 1 German  
 PATENT INFORMATION:

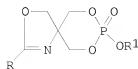
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2600203	A1	19760708	DE 1976-2600203	19760105 <--
US 4141749	A	19790227	US 1975-538636	19750106 <--
SE 7513609	A	19760707	SE 1975-13609	19751203 <--
FI 7503659	A	19760707	FI 1975-3659	19751229 <--
BE 837326	A2	19760706	BE 1976-163324	19760106 <--
BR 7600039	A	19760803	BR 1976-39	19760106 <--
JP 51128456	A	19761109	JP 1976-1094	19760106 <--
US 4163463	A	19790807	US 1978-959396	19781109 <--
PRIORITY APPLN. INFO.:			US 1975-538636	A 19750106

AB A tubular sausage casing is prepared from viscose containing 1-20% by weight oxazoline wax by extrusion, coagulation, and regeneration of the cellulose [9004-34-6]. Thus, viscose containing 7.7% cellulose was mixed with an oxazoline wax suspension to give 5% by weight wax based on cellulose. The suspension contained oxazoline wax TS-970 (reaction product of 1 mole Tris and 3 moles stearic acid) [15655-33-1] 78.76, Span 60 10.81, Tween 60 5.04, 2-amino-2-methyl-1-propanol 4.10, water 492.30, Alkaterge T 5.96, and Fatty Acid 3 2.94 g, and the wax particle size was generally 10-20 µm. The viscose-wax mixture was extruded through an annular nozzle in a coagulating and regenerating bath to produce a nonreinforced casing. The casing was then passed through a solution of 10-12% aqueous glycerol for softening. There were fewer rejects than normal during crimping of the casing, and filling and smoking of frankfurters was normal. Stripability of the casings was excellent, and anal. showed that the sausage contained <1 ppb TS-970.

L8 ANSWER 82 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1976:494348 HCAPLUS  
 DOCUMENT NUMBER: 85:94348  
 ORIGINAL REFERENCE NO.: 85:15117a,15120a  
 TITLE: Phosphated oxazolines  
 INVENTOR(S): Mudd, Daniel G.  
 PATENT ASSIGNEE(S): Commercial Solvents Corp., USA  
 SOURCE: U.S., 2 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3956305	A	19760511	US 1975-575662	19750508 <--
PRIORITY APPLN. INFO.:			US 1975-575662	A 19750508

GI



I



AB Oxazolines I (R = heptadecenyl, R1 = Et, Bu; R = undecyl, heneicosyl, R1 = Et), useful as corrosion inhibitors in lubricating oils (tests given), were prepared by treating R-substituted 4,4-bis(hydroxymethyl)-2-oxazoline with (R1O)3P in the presence of Et3N at elevated temperature and oxidizing the product with O.

L8 ANSWER 83 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976:92583 HCAPLUS

DOCUMENT NUMBER: 84:92583

ORIGINAL REFERENCE NO.: 84:15113a,15116a

TITLE: Oxazoline-alkyl acid phosphate adducts useful as ashless antiwear additives

INVENTOR(S): Miller, Alfred H.

PATENT ASSIGNEE(S): Exxon Research and Engineering Co., USA

SOURCE: U.S., 5 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 3920567	A	19751118	US 1974-536822	19741227 <--
PRIORITY APPLN. INFO.:			US 1974-536822	A 19741227

AB Ashless antiwear additives for lubricating oils were prepared by treating dibutyl phosphate (I) [107-66-4] with a hydroxyalkyl-substituted oxazoline having a C8-22 alkyl or alkenyl radical attached to the ring C atom between the N and O atoms of the oxazoline ring and  $\geq 1$  hydroxyalkyl group having 1-4 C atoms attached to one of the other ring C atoms. Thus, a mixture of 412 grams 2-heptadecyl-4,4-bis(hydroxymethyl)oxazoline [14466-50-3] and 51 grams I at 75° was heated to 100° C and kept at this temperature for 2 hrs to form a clear product that was soluble in lubricating basestocks, e.g. a hydrocarbon oil derived from solvent-extracted naphthenic crudes having 1,060 SUS viscosity at 100° and an oil derived from a solvent-extracted paraffinic base crude having 300 SUS (100°F.).

L8 ANSWER 84 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1975:580219 HCAPLUS

DOCUMENT NUMBER: 83:180219

ORIGINAL REFERENCE NO.: 83:28321a,28324a

TITLE: Oxazoline emulsifier in polymerization of styrene and butadiene

INVENTOR(S): Frump, John A.

PATENT ASSIGNEE(S): Commercial Solvents Corp., USA

SOURCE: U.S., 5 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 3886128	A	19750527	US 1973-406755	19731015 <--
PRIORITY APPLN. INFO.:			US 1973-406755	A 19731015

GI For diagram(s), see printed CA Issue.

AB Butadiene and styrene are polymerized in the presence of rosin acid K salt primary emulsifiers and oxazoline (I, R = C3-17 alkyl, R1, R2 = Me, Et, or hydroxymethyl) secondary emulsifiers to improve polymer coagulation during

acidification. Thus, 150 ml soap solution, prepared from Dresinate 214 90.5, KCl 8.1, and H2O 3901.4 g, and 0.075 g oxazoline (I, R = pentyl, R1, R2 = Me) [55011-28-4] at pH  $\geq 10$  are chilled to 0-5°, 21.96 g styrene-mercaptan solution, 55 g liquid butadiene and 5 ml activator are added and the reactor rotated 5 min in a bath at 17°, 0.045 g p-menthane hydroperoxide was added and the reaction vessel rotated 8 hr at 30 rpm. The reaction was stopped with N-diethylhydroxylamine and the product dried and weighed showing the yield 94%, pre-floc 0.310%, and recovery 99%, compared with 74%, 0.010%, and 43%, resp., for a control (mean of 6 runs) containing Na naphthalenesulfonate secondary emulsifier.

L8 ANSWER 85 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1973:138100 HCAPLUS  
 DOCUMENT NUMBER: 78:138100  
 ORIGINAL REFERENCE NO.: 78:22191a,22194a  
 TITLE: Agents for marking the skin or fur of animals  
 INVENTOR(S): Firth, Jay A.; Frump, John A.  
 PATENT ASSIGNEE(S): Commercial Solvents Corp.  
 SOURCE: U.S., 4 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3708334	A	19730102	US 1971-126872	19710322 <--
PRIORITY APPLN. INFO.:			US 1969-845559	A3 19690728

AB A durable marking composition, for marking the skin or fur of animals, contained a pigment, a 4,4-bis(hydroxymethyl)-2-oxazoline derivative and optionally a hydrocarbon. Thus, 2-heptadecenyl-4,4-bis(hydroxymethyl)-2-oxazoline (I) [28984-69-2] 40, red iron oxide pigment 40 and paraffin wax 20 parts was stirred at 50-70.deg. and molded into a crayon. The crayon was used to mark cattle; the mark was still legible after 4 weeks in the open.

L8 ANSWER 86 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1972:450538 HCAPLUS  
 DOCUMENT NUMBER: 77:50538  
 ORIGINAL REFERENCE NO.: 77:8373a,8376a  
 TITLE: 2-Alkyl-4,4-dimethyl-2-oxazolinium salt as a surface-active agent  
 AUTHOR(S): Kimura, Chikai; Murai, Koichi; Sato, Shigeo  
 CORPORATE SOURCE: Fac. Min., Akita Univ., Akita, Japan  
 SOURCE: Yukagaku (1972), 21(4), 197-200  
 CODEN: YK GKAM; ISSN: 0513-398X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Japanese  
 AB AcOH, lactic acid, citric acid, and tartaric acid salts of oxazoline derivs. (I, R = C9H19, C11H23, or C13H27) had good surface-active properties in water. AcOH salts with larger alkyl groups in I had better surface-active properties at low concns. I were synthesized from 2-amino-2-methylpropanol, HCHO, and a C10, C12, or C14 fatty acid. Wettability, emulsifying properties, and foaming properties of the salts, e.g. 4,4-dimethyl-2-tridecyl-2-oxazolinium acetate [35325-09-8], 4,4-dimethyl-2-undecyl-2-oxazolinium lactate [35325-10-1], and 7 other salts were given.

L8 ANSWER 87 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1972:406795 HCAPLUS  
 DOCUMENT NUMBER: 77:6795

ORIGINAL REFERENCE NO.: 77:1175a,1178a  
 TITLE: Filter aid conditioners  
 INVENTOR(S): Davis, Bernard J.  
 PATENT ASSIGNEE(S): Reichhold Chemicals, Inc.  
 SOURCE: U.S., 3 pp. Division of U.S. 3,570,669 (CA 75:6849d).  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3648847	A	19720314	US 1970-57016	19700609 <--
PRIORITY APPLN. INFO.:			US 1970-57016	A 19700609

AB The filtration capacity of diatomaceous earth-asbestos filter aids for nonaq. systems, e.g. polypiperylene [25212-15-1] solns., was improved by mixing with .1eq. 1% Deltazoline A-14 (I) [25080-00-6].

L8 ANSWER 88 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN  
 ACCESSION NUMBER: 1972:87554 HCAPLUS  
 DOCUMENT NUMBER: 76:87554  
 ORIGINAL REFERENCE NO.: 76:14093a,14096a  
 TITLE: Agents for controlling detergent foaming  
 INVENTOR(S): Inamurato, Jack T.  
 PATENT ASSIGNEE(S): Colgate-Palmolive Co.  
 SOURCE: Ger. Offen., 56 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2126061	A	19711209	DE 1971-2126061	19710526 <--
US 3696056	A	19721003	US 1970-41392	19700528 <--
US 3704267	A	19721128	US 1970-41308	19700528 <--
US 3709836	A	19730109	US 1970-41602	19700528 <--
US 3714074	A	19730130	US 1970-41359	19700528 <--
US 3716499	A	19730213	US 1970-41601	19700528 <--
US 3730912	A	19730501	US 1970-41358	19700528 <--
ZA 7102892	A	19721227	ZA 1971-2892	19710504 <--
GB 1286054	A	19720816	GB 1971-1286054	19710514 <--
FR 2093742	A5	19720128	FR 1971-19020	19710526 <--
BE 767873	A1	19711018	BE 1971-104056	19710528 <--
NL 7107442	A	19711130	NL 1971-7442	19710528 <--
BR 7103293	D0	19730517	BR 1971-3293	19710528 <--
CA 944652	A1	19740402	CA 1971-114265	19710528 <--
CA 945036	A1	19740409	CA 1971-114262	19710528 <--
CA 945034	A1	19740409	CA 1971-114263	19710528 <--
CA 945037	A1	19740409	CA 1971-114264	19710528 <--
CA 949417	A1	19740618	CA 1971-114266	19710528 <--
CH 552053	A	19740731	CH 1971-7870	19710528 <--
CA 954004	A1	19740903	CA 1971-114267	19710528 <--
AT 325182	B	19751010	AT 1971-4625	19710528 <--
SE 382464	B	19760202	SE 1971-6994	19710528 <--
DK 138662	C	19790319	DK 1971-2622	19710528 <--
DK 138662	B	19781009		
AT 7401787	A	19750915	AT 1974-1787	19740305 <--
PRIORITY APPLN. INFO.:			US 1970-41308	A 19700528
			US 1970-41358	A 19700528

US 1970-41359	A	19700528
US 1970-41392	A	19700528
US 1970-41601	A	19700528
US 1970-41602	A	19700528
AT 1971-4625	A	19710528

AB Agents for controlling detergent foaming were composed of a fatty acid and one or more of each of a fatty amine or amide, an oxazoline, an ethoxylated ammonium compound, or of an ethoxylated linear alc. and a fatty amine or amide or an oxazoline. For example, a detergent composition containing

H2O 8.5, Na tridecylbenzenesulfonate 10.0 NaBO3.4H2O 30.0, Na5P3O10 35.0, NaOH 0.4, Na silicate 7.0, Na CM-cellulose 0.5, poly(vinyl alc.) 0.2, Hyfac 43\*(hydrated fish fatty acid) 3.0, Neodol 45-11\*(polyethoxylated linear alc.) 2.0, 2-heptadecyl-4-dimethyl-2-oxazoline (I) [34331-80-1] 2.0, and Na2SO4 1.4% was prepared and did not foam excessively during machine pre-wash or wash cycles. The foam control was lacking when only 1 or 2 of Hyfac 43, Neodol 45-11, or I was used.

L8 ANSWER 89 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1972:59596 HCAPLUS  
 DOCUMENT NUMBER: 76:59596  
 ORIGINAL REFERENCE NO.: 76:9605a,9608a  
 TITLE: Hydroxymethyl vinyl oxazolines  
 PATENT ASSIGNEE(S): Commercial Solvents Corp.  
 SOURCE: Brit., 4 pp.  
 CODEN: BRXXAA  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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GB 1259532		19720105	GB	19690311 <--
PRIORITY APPLN. INFO.:			US	19680311

GI For diagram(s), see printed CA Issue.

AB The title compds. (I, R1=H) were prepared by alkaline hydrolysis of the corresponding esters (I, R1=alkanoyl or alkenoyl). Thus, a mixture of I (R=Et, R1=EtCO, R2=Me), NaOMe-MeOH and 0.01 weight % 2,5-di-tert-butylhydroquinone in MeOH was refluxed with removal of MeOH-EtCO2Me azeotrope to give 90% I (R=Et, R1=H, R2=Me). Similarly prepared were I (R1=H, R and R2 given): Me, Me; CH2OH, Me; Et, C10H21; Et, C12H25; Et, C16H33; Et, C16H31.

L8 ANSWER 90 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1971:406849 HCAPLUS  
 DOCUMENT NUMBER: 75:6849  
 ORIGINAL REFERENCE NO.: 75:1131a,1134a  
 TITLE: Oxazoline-conditioned filter aids for removing suspended solids from polymers  
 INVENTOR(S): Davis, Bernard Joseph  
 PATENT ASSIGNEE(S): Reichhold Chemicals, Inc.  
 SOURCE: U.S., 3 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 3570669	A	19710316	US 1969-789592	19690107 <--

PRIORITY APPLN. INFO.:

US 1969-789592

A 19690107

GI For diagram(s), see printed CA Issue.

AB A filter apparatus containing 4,4-bis(hydroxymethyl)-2-(1-tetradecene-2-yl)oxazoline (I) facilitated the removal of suspended solids in polymers and polymer solns. in nonpolar solvents. Thus, polypiperylene prepared in 2% AlCl<sub>3</sub>-lime neutralized solution was filtered through a press of diatomaceous earth, asbestos fiber, and 0.025-1% I to filter impurities from 32,000-35,000 gal/cycle.

L8 ANSWER 91 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1971:24587 HCAPLUS

DOCUMENT NUMBER: 74:24587

ORIGINAL REFERENCE NO.: 74:3989a,3992a

TITLE: Flotation of cassiterite

INVENTOR(S): Bushell, Charles H. G.; Johnston, David L.

PATENT ASSIGNEE(S): Cominco Ltd.

SOURCE: Can., 14 pp.

CODEN: CAXXA4

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CA 854248		19701020	CA	19680524 <--
GB 1212496			GB	

AB A new method for operations on fine particles, low-grade ore, and tailings from previous flotations consists in preliminary conventional flotation of sulfides, high-intensity wet magnetic separation of such minerals as pyrrhotite and magnetite from the tailings, and final flotation of the nonmagnetic residue at pH 10.8-11.4 with  $\leq 10$  lb/ton of any type of starch, and 1.6-4 lb/ton of a substituted oxazoline wetting agent, e.g. Alkaterge-T. With this method and reagent, concentration factors were typically 2-3 at 95% recovery in rougher flotation of British Columbia ore containing 0.11% Sn, and upgrading by a factor of 10-12 was accomplished at 80% Sn recovery in 3-5 cleaning steps. The details and results of many expts. and operations of the process are given on lean ore, showing somewhat better recovery at 35-40° than at 20°, and much better concentration and selectivity with the Alkaterge collector than with fatty or oleic acid. In recovering Sn from pyrite tailings, Alkaterge gave 50-75% recovery as concs. containing 6-10% Sn, where other reagents gave 35% recovery as concns. having only 1.6% Sn.

L8 ANSWER 92 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1971:4592 HCAPLUS

DOCUMENT NUMBER: 74:4592

ORIGINAL REFERENCE NO.: 74:735a,738a

TITLE: Single-bath dyeing of polyester and poly(acrylonitrile) fiber mixtures

INVENTOR(S): Von der Eltz, Hans U.; Jeths, Johannes; Boecker, Alfons B.

PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.

SOURCE: Ger. Offen., 15 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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DE 1909517	A	19700917	DE 1969-1909517	19690226 <--
DE 1909517	B2	19731122		
DE 1909517	C3	19740627		
NL 7002180	A	19700828	NL 1970-2180	19700217 <--
US 3672815	A	19720627	US 1970-14753	19700224 <--
AT 299884	B	19720710	AT 1970-1674	19700224 <--
SE 349613	B	19721002	SE 1970-2446	19700225 <--
BE 746593	A	19700826	BE 1970-746593	19700226 <--
FR 2032425	A7	19701127	FR 1970-6903	19700226 <--
GB 1285492	A	19720816	GB 1970-1285492	19700226 <--
PRIORITY APPLN. INFO.:			DE 1969-1909517	A 19690226

GI For diagram(s), see printed CA Issue.

AB Mixed fibers comprising polyesters, polyacrylonitrile (I), and possibly viscose rayon are dyed by the Thermosol process to deep level shades by including nonionic dispersants in the acid padding liquor containing the disperse, cationic, and reactive dyes. Thus, a 1:1 poly(ethylene terephthalate)-I mixed fiber web was padded with a dyebath containing disperse dyes, cationic dyes, a 1-25 stearyl alc.-ethylene oxide (II) condensate, polyethylene glycol, a 1:70 condensate of 2-heptadecyl-4-ethyl-4-(hydroxymethyl)oxazoline (III) and II, and HOAc. The padded web is dried at 100° and heat treated at 200° to yield level dyed mixed fibers. Polyester-viscose rayon mixed fibers are also dyed similarly by including reactive dyes in the dye mixture

L8 ANSWER 93 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1971:4587 HCAPLUS

DOCUMENT NUMBER: 74:4587

ORIGINAL REFERENCE NO.: 74:735a,738a

TITLE: Single-bath dyeing of mixtures of polyester and acid modified polyester fibers

INVENTOR(S): Von der Eltz, Hans U.; Jeths, Johannes; Boecker, Alfons B.

PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.

SOURCE: Ger. Offen., 15 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
DE 1909516	A	19700917	DE 1969-1909516	19690226 <--
DE 1909516	B2	19731122		
DE 1909516	C3	19740627		
AT 299883	B	19720710	AT 1970-1670	19700224 <--
BE 746586	A	19700826	BE 1970-746586	19700226 <--
FR 2032424	A7	19701127	FR 1970-6902	19700226 <--
GB 1283001	A	19720726	GB 1970-1283001	19700226 <--
BR 7017018	D0	19730104	BR 1970-217018	19700226 <--
PRIORITY APPLN. INFO.:			DE 1969-1909516	A 19690226

AB Mixts. of polyester and acid-modified polyester fibers are dyed to multi-shades via the thermosol process by padding the mixed fibers with a single free-acid-containing dye bath containing disperse dyes, cationic dyes, polyglycols, and nonionic dispersants. Thus, a mixed polyester-acid modified polyester fiber is padded to 65 weight % pickup with a 30° dye bath containing a disazo disperse dye, a cationic dye, HOAc, a 25:1 ethylene oxide (I)-stearyl alc. condensate, polyethylene glycol (II) of mol. weight 6000, a 70:1 I-2-heptadecyl-4-ethyl-4-(hydroxymethyl)oxazoline condensate, and II of mol. weight 600. The padded fibers are dried at 100° for 40 sec and washed with an aqueous nonionic surfactant solution to yield a fiber mixture with the polyester fibers dyed a yellow shade and the

acid-modified polyester fibers dyed a dark green shade. Mixts. containing viscose rayon are also dyed via the thermosol process using this technique if an addnl. padding step with a reaction dye is inserted following the padding with the mixture of disperse and cationic dyes.

L8 ANSWER 94 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 1970:91137 HCAPLUS

DOCUMENT NUMBER: 72:91137

ORIGINAL REFERENCE NO.: 72:16592a

TITLE: Polyester resins containing oxazoline derivatives

INVENTOR(S): Davis, Bernard J.; Ranson, Wesley J.; Holbert, James N.

PATENT ASSIGNEE(S): Reichhold Chemicals, Inc.

SOURCE: U.S., 4 pp.  
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 3493635	A	19700203	US 1967-649476	19670628 <--
PRIORITY APPLN. INFO.:			US 1967-649476	A 19670628

GI For diagram(s), see printed CA Issue.

AB An unsatd. polyester of a dihydric alc. and an ethylenically unsatd. dicarboxylic acid, an ethylenically unsatd. monomer, and an oxazoline composition are polymerized in the presence of a catalyst to give a transparent plastic with improved light-transmission and absorption properties, improved abrasion resistance, and a reduced tendency to condense water as droplets. The polymer is used in the manufacture of reinforced plastic panels for greenhouses. Thus, a mixture of maleic anhydride 490, phthalic anhydride 741, and diethylene glycol 1167 g was heated to 150° during 2 hr and heating was continued at 15°/hr to 230° to give a mixture with an acid number of 70. The temperature was increased to 245° and held until the acid number decreased to <50. The resin was cooled to 100° and blended with 0.003% tertbutylcatechol inhibitor. The warm polyester (100 parts) was run into 42.8 parts styrene and the 75% solid solution, with an acid number of 35, and viscosity of 750 cP at 25° was cooled and kept in cold storage. I (0.05-1%) was blended with 100 g resin and 1 g Bz202 was added and 4-5 g of the mixture was spread onto glass cloth and laminates were formed at a 3:2 glass cloth-resin ratio. The laminates were held at room temperature for 1 hr to gel the resin and cured at 30 psi and 120° in 25 min to give reinforced sheets which showed no discoloration and had good water-shedding properties. The bond between the glass cloth and resin was resistant to water encroachment and the panels showed no scuffing when struck by the edge of a coin.

L8 ANSWER 95 OF 133 HCAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 1970:44585 HCAPLUS

DOCUMENT NUMBER: 72:44585

ORIGINAL REFERENCE NO.: 72:8217a,8220a

TITLE: Antistatic agents for high molecular weight synthetic polymers

PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.

SOURCE: Brit., 8 pp.  
CODEN: BRXXAA

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1171983		19691126	GB 1967-4244	19670127 <--
DE 1694105			DE	
US 3547863		19701215	US	19670123 <--
PRIORITY APPLN. INFO.:			DE	19660128

AB Polypropylene (I), linear polyethylene (II), polystyrene (III), and poly(ethylene terephthalate) (IV) compns. were mixed with  $\geq 1$  antistatic agent prepared by treating an oxazoline with ethylene oxide (V) and (or) propylene oxide (Va). Thus antistatic agents were dissolved in Me<sub>2</sub>CO, and mixed with granular polymer, then the Me<sub>2</sub>CO was evaporated in vacuo by heating to give a 1% concentration of the antistatic agent. From the

mixts.,

1 mm thick pressed sheets were made between chrome plated brass plates at 150° for III, 160° for II, 200° for I, and 270° for IV. Electrostatic charges were produced on samples 7 + 7 cm x 1 mm, horizontally oscillating, by using a cylinder covered with a woollen cloth rotated at constant speed. The electrostatic maximum charge produced by repeated friction was determined by an electrostatometer 6 cm from the test sheet. Surface voltage measurements were taken immediately after the preparation of the sample, and again after the sample was wiped off with a wet cloth and allowed to dry 5 hr to give the following results (polymer-oxazoline systems, moles V used/mole oxazoline, surface voltages before and after wiping given): I-2-heptadecyl-4-ethyl-4-(hydroxymethyl)oxazoline (VI), 0.40, -110, 100; I-2-( $\alpha$ -ethylpentyl)-4-ethyl-4-(hydroxymethyl)oxazoline (VII), 0.40, -37, -370; I-2-naphthyl-4-ethyl-4-(hydroxymethyl)oxazoline (VIII), 0.30, -100, -290; I-2-undecyl-4-ethyl-4-(hydroxymethyl)oxazoline (IX), 0.5, -18, -405; II-VI, 0.40, -70, -400; II-VI, 0.5, -100, -450; II-IX, 0.5, -18, -380; II-2-undecyl-4,4-bis(hydroxymethyl)oxazoline, 0.30, -200, -500; II-VIII, 0.30, -160, -430; II-2-(heptoxymethyl)-4-ethyl-4-(hydroxymethyl)oxazoline, 0.2, -90, -370; II-2-(dodecylthiomethyl)-4-methyl-4-(hydroxymethyl)oxazoline, 0.10, -145, -490; III-IX, 0.30, 10, -60; III-IX, 0.10, -310, -222; III-VII, 0.40, 260, 148; III-VI, 0.5, 185, -225; IV-VII, 0.30, 60, -72; IV-VI, 0.50, -55, -110; IV-VIII, 0.40, -90, -148; IV-2-octyl-4-ethyl-4-(hydroxymethyl) oxazoline, 0.40, 150, -95. In contrast, the I, II, III, IV controls without additives had resp. voltages -2790, -2910, -2700, -2805, -3100, -, -2200, -, and attracted C black, while the test samples and a I-VI composition containing 0.3 mole Va and 0.20 mole V (-65 V, -350 V) did not. Samples were stored at elevated temps. then cooled to -40° without exudation; even when heated intensively in an injection molding apparatus for a prolonged period, no discoloration occurred.

L8 ANSWER 96 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1969:116324 HCAPLUS

DOCUMENT NUMBER: 70:116324

ORIGINAL REFERENCE NO.: 70:21763a, 21766a

TITLE: Polyesters from oxazoline polyols

INVENTOR(S): Miranda, Thomas J.; Herman, Herbert R.

PATENT ASSIGNEE(S): O'Brien Corp.

SOURCE: U.S., 5 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3438943	A	19690415	US 1966-584939	19660817 <--



PRIORITY APPLN. INFO.:

US 1966-584939

A 19660817

AB Polyesters are prepared from polycarboxylic acids containing  $\leq 4$  CO<sub>2</sub>H groups and hydroxyalkyl-substituted oxazolines. Thus, a mixture of H<sub>2</sub>NC(CH<sub>2</sub>OH)<sub>3</sub> 130, linoleic acid 280, and xylene 100 g. was refluxed and freed of water by azeotropic distillation for 6 hrs., at a final temperature of .apprx.225°. The product was solidified under N, giving a quant. yield of soft, white, waxy 2-heptadecadienyl-4,4-bis(hydroxymethyl)oxazoline (I). A mixture of I 201.5, trimellitic anhydride 74.3, and tetrahydrofurfuryl alc. 39.6 g. was refluxed while water was distilled from the mixture After 65 min., the acid number was 54.2

and

11 g. phthalic anhydride was added. Refluxing was continued for 30 addnl. min., giving acid number 56.0. The product was cooled to 140° and poured with stirring into a solvent mixture containing distilled water 365.5, iso-PrOH 42.5, and 26° Baume NH<sub>4</sub>OH 31.7 g., giving a resin solution with d. 8.523 lb./gal., Gardner viscosity X, a slightly hazy homogeneous appearance, and nonvolatile content 38.4%. Other monomers used in polyester preparation were 2,2-dimethylolpropionic acid and itaconic anhydride. A polyester containing the latter monomer was mixed with styrene, Bu Cellosolve, and tert-Bu<sub>2</sub>O<sub>2</sub>, giving a coating composition which could be formulated into a semi-gloss enamel. The use of trimesic acid and the oxazoline monomers 2-heptadecatrienyl-4,4-bis(hydroxymethyl)-oxazoline and 2-heptadecenyl-4,4-bis(hydroxymethyl)oxazoline was also claimed. These polymers give excellent results when used as the binders in water-thinned semi-gloss paints. They do not gel on the addition of ZnO.

L8 ANSWER 97 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1969:58876 HCAPLUS

DOCUMENT NUMBER: 70:58876

ORIGINAL REFERENCE NO.: 70:11087a,11090a

TITLE: Water-repellant compositions from oxazolines and thermosetting-resin binders

INVENTOR(S): Gagliardi, Domenick D.

PATENT ASSIGNEE(S): Commercial Solvents Corp.

SOURCE: U.S., 4 pp.  
CODEN: USXXAM

DOCUMENT TYPE: Patent  
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3423349	A	19690121	US 1966-555713	19660607 <--
GB 1193552	A	19700603	GB 1967-1193552	19670510 <--
BE 699533	A	19671116	BE 1967-699533	19670606 <--

PRIORITY APPLN. INFO.:

US 1966-555713

A 19660607

GI For diagram(s), see printed CA Issue.

AB A composition is prepared from a thermosetting resin binder and an oxazoline (I)

for imparting water- and oil-repelleny to fibrous materials. Thus, a hot melt blend was prepared by heating at 105°C. a mixture containing I (R = stearyloxymethyl (A), R<sub>1</sub> = heptadecyl (B)) 30, AC Polyethylene 629 30, and nonylphenol-ethylene oxide condensation product 15 parts. The melt was allowed to cool to 95°C. and 3.5 parts of a 20% aqueous solution of KOH added. Then 221.5 parts of water was added with agitation to yield a homogeneous emulsion. A textile padding bath was obtained by mixing 10 parts of this emulsion into a solution of tris(methoxymethyl)melamine 5, ZnO 0.75, and water 84 parts. Pieces of cotton sateen cloth were padded with this bath and air-dried 5 min. at 250°F. and cured 5 min. at 300°F. to yield water-repellent fabric. Similarly used were I (R<sub>1</sub> and R given): 1-hexadecylvinyl (C), A; 1-heneicosylvinyl,

behenoyloxymethyl; B, HOCH<sub>2</sub>; C, HOCH<sub>2</sub>; heneicosyl, HOCH<sub>2</sub>; 1-eicosylvinyl, HOCH<sub>2</sub>.

L8 ANSWER 98 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1968:428660 HCAPLUS  
DOCUMENT NUMBER: 69:28660  
ORIGINAL REFERENCE NO.: 69:5371a,5374a  
TITLE: Ethyl cellulose compositions containing oxazolines as plasticizers  
PATENT ASSIGNEE(S): Commercial Solvents Corp.  
SOURCE: Brit., 4 pp.  
CODEN: BRXXAA  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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GB 1116778		19680612	GB 1966-45381	19661011 <--
PRIORITY APPLN. INFO.:			US	19651117

GI For diagram(s), see printed CA Issue.

AB Oxazolines of general structure I are used as plasticizers for Et cellulose (II). Thus, solns. of II and a I (Chemacoil TA-100, III) derived from tall oil and H<sub>2</sub>NC(CH<sub>2</sub>OH)<sub>3</sub> were cast as films onto glass from 4:1 toluene-EtOH solution. All films were strong and tough, but those containing III had greater flexibility and elongation. The results are shown in the table. Others used as plasticizers were (R<sub>1</sub> and R<sub>2</sub> given): heptadecyl, heptadecyl; heptadecenyl, heptadecyl; 1-dodecenylvinyl, dodecyl; andoctyl.

L8 ANSWER 99 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1968:411581 HCAPLUS  
DOCUMENT NUMBER: 69:11581  
ORIGINAL REFERENCE NO.: 69:2227a,2230a  
TITLE: Fiberboard containing a copolymer binder of oxazoline oil and a vinyl monomer  
INVENTOR(S): Purcell, Robert F.  
PATENT ASSIGNEE(S): Commercial Solvents Corp.  
SOURCE: U.S., 3 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 3382197	A	19680507	US 1964-383236	19640716 <--
PRIORITY APPLN. INFO.:			US 1964-383236	A 19640716

GI For diagram(s), see printed CA Issue.

AB A high-strength water-resistant fiberboard is prepared from a cellulosic filler and a polymerizable binder containing oxazoline oil (I) 30-90, vinyl monomer 70-10, peroxide catalyst 0.1-10, (on weight vinyl monomer) and metal drier 0.01-2% (on weight I). I is the reaction product of tris(hydroxymethyl)-aminomethane (II) with HCHO and a fatty acid (III) in varying proportions. The board is prepared by hot pressing. Thus, various I, prepared from oleic, linoleic, and rosin acids with II and HCHO, 20% rosin content, were blended with equal amts. of styrene, 1% Bz2O<sub>2</sub> or cumene peroxide catalyst and 6% Co naphthenate or a mixture of 6% Co naphthenate and 24% Pb naphthenate derivs. to form binders. Chipboard was

compounded by mixing 2 g. of the binder compns. with 25 g. wood chips and pressing at 20,000 psi. for 15 min. at 300°F. and 20 min. at 250°F. The board formed was flexible and hardened with age. A sample prepared without binder lacked strength and one containing I without a vinyl monomer would not cure. Other I used were 2-(1-hexadecylvinyl)-4,4-bis(stearoyloxymethyl)-2-oxazoline (from 1 mole II, 3 moles stearic acid with 1 mole HCHO), 2-(1-heptylvinyl)-4,4-bis(nonanoyloxymethyl)-2-oxazoline (from 1 mole II, 3 moles nonanoic acid, and 1 mole HCHO), 2-amino-2-ethyl-1,3-propanediol (from 2 moles linseed fatty acids and 1 mole HCHO) and 2-[1-(9,10-heptadecenyl)ethenyl]-4,4-dimethyl-oxazoline (from 1 mole 2-amino-2-methyl-1-propanol, 1 mole oleic acid, and 1 mole HCHO). Et acrylate, Me methacrylate and vinyltoluene can be used with Zr or Co octanoate drier and tert-Bu2O2 catalyst.

L8 ANSWER 100 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1968:14166 HCAPLUS  
 DOCUMENT NUMBER: 68:14166  
 ORIGINAL REFERENCE NO.: 68:2755a,2758a  
 TITLE: Ethyl cellulose compositions  
 INVENTOR(S): Cockerham, Lloyd E.; Purcell, Robert F.  
 PATENT ASSIGNEE(S): Commercial Solvents Corp.  
 SOURCE: U.S., 3 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3348958		19671024	US 1965-508367	19651117 <--
FR 1499745			FR	

GI For diagram(s), see printed CA Issue.

AB Et cellulose compns. are plasticized with oxazolines and are useful as surface coatings or films. The oxazolines used as plasticizers were I (R = C17H35, R1 = R2 = C17H35CO2CH2) (II), I (R = C(CH2)C12H25, R1 = R2 = C12H25CO2CH2), and I (R = C8H17, R1 = R2 = C8H17CO2CH2). Thus, a solution was prepared containing 20 parts Et cellulose (viscosity grade 100) and 10

parts

II in 100 g. 80:20 PhMe-EtOH. Films were cast on glass plates and dried and were tough, flexible, strong, and clear.

L8 ANSWER 101 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1967:459633 HCAPLUS  
 DOCUMENT NUMBER: 67:59633  
 ORIGINAL REFERENCE NO.: 67:11203a,11206a  
 TITLE: A new photographic process  
 INVENTOR(S): Ville, Ivan B.  
 PATENT ASSIGNEE(S): Eastman Kodak Co.  
 SOURCE: Fr., 6 pp.  
 CODEN: FRXXAK  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1463471		19661223	FR	<--
GB 1092387			GB	
US 3402111		19680917	US 1965-427289	19650122 <--
PRIORITY APPLN. INFO.:			US	19650122

AB A neg. image with respect to the original is obtained by incorporating in the oily phase of the developer before emulsification,  $\geq 1$  dyes soluble in the oil, or even  $\geq 1$  solid pigments. After photographic exposure of the photoconducting surface, followed by electrolytic development of the emulsion, the solvent containing the dye or pigment is deposited on the exposed areas, and a neg. reproduction of the original image is obtained. The image thus obtained has a good mech. resistance because of the tendency of the solvent to diffuse into the photoconducting layer as soon as it is deposited on the surface. In order to obtain a pos. image with respect to the original, the conducting surface is 1st photographically exposed and then treated with the oily emulsion, containing neither dye nor pigment. This treatment provokes on the photoconducting surface the deposit following an image of a visible or almost visible oily layer, which will act as a stencil in the course of final development designed to obtain the visible image. This treatment makes the exposed areas nonconducting while the nonexposed areas retain their photoconducting properties. The photoconducting layer is next uniformly exposed, and the development is effected by a developer which deposits on the areas still photoconductive a product forming a visible image (e.g., a dye or solid pigment, or a metal), and a pos. reproduction of the original is obtained. E.g., to a 1-1. Waring blender, 50 ml. of distilled H<sub>2</sub>O and 5 drops of a cationic surface-active agent are added, such as Catanac SP, and mixing is effected. Then there are quickly added, with the mixer kept at medium speed, a solution of 5 ml. of 1,1,2,2-tetrachloro-1,2-difluoroethane, 0.1 g. of Oil Black BT, and 5 drops of Duomeen S., giving an emulsion of oil in H<sub>2</sub>O. The emulsion is diluted with distilled H<sub>2</sub>O so as to obtain proportions of 1:1 and it is placed in the treatment machine. A photoconducting layer consisting of ZnO in a resin binder is placed in contact with a negative and it is exposed under a light of .apprx.5350 lumens. The layer is then developed in the photoconducting treatment apparatus at a speed of about 8 mm./sec. by causing a continuous current of 60 v. to flow between the anode and the exposed layer. The emulsion is stirred. This treatment causes the formation of a deposit of the Freon-Oil Black phase of the emulsion in the exposed areas of the layer and a proof whose values are neg. with respect to those of the original. A procedure is also described for the preparation of a pos. proof with respect to the original.

L8 ANSWER 102 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1967:40425 HCAPLUS  
 DOCUMENT NUMBER: 66:40425  
 ORIGINAL REFERENCE NO.: 66:7739a,7742a  
 TITLE: Method of making a bonded mat of surface-treated glass fibers  
 INVENTOR(S): Wong, Robert; Wise, Belford D.; Morrison, Albert Russell  
 PATENT ASSIGNEE(S): Owens-Corning Fiberglas Corp.  
 SOURCE: U.S., 7 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 3288582		19661129	US 1960-30643	19600520 <--
GI	For diagram(s), see printed CA Issue.				
AB	Glass and similar fibers may be surface treated where the surface treatment is lubricious and hydrophobic in nature and does not measurably increase the rate of ion migration from the fibers. The coating is also durable because of actual bonding between the coating and glass, and is one to which available binders will adhere. For example, a com. available				

surface-active agent (I) was applied to hot glass fibers immediately after formation of the fibers from a body of molten glass. The pH of an aqueous dispersion of this treating agent is 7.3. Various types of glass were treated with the surface-active agent. The surface-active agent was sprayed on the hot glass in the proportion of 1 lb. to 100-1000 lb. of glass. Details of fiber forming apparatus of the type used and the operation to produce glass fibers may be found in U.S. 2,206,058 (CA 34, 75609). The results show that the rate of migration of the ions in the treated and untreated fibers were substantially identical. When stearic acid was used as the coating agent the migration of ions showed a considerable increase in rate.

L8 ANSWER 103 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1966:59490 HCAPLUS  
 DOCUMENT NUMBER: 64:59490  
 ORIGINAL REFERENCE NO.: 64:11086d-f  
 TITLE: Stabilized formaldehyde solutions  
 INVENTOR(S): Butter, George N.  
 PATENT ASSIGNEE(S): Commercial Solvents Corp.  
 SOURCE: 2 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3222403		19651207	US 1961-114602	19610605 <--
PRIORITY APPLN. INFO.:			US	19610605

GI For diagram(s), see printed CA Issue.

AB An aqueous HCHO solution was stabilized against polymerization by I. Thus, 1 l.

of a 44% HCHO solution containing 50 ppm. of 4,4-bis(4-hydroxy-2-oxabutyl)-2-heptadecenyl-2-oxazoline (I) and 1 l. of a 44% HCHO solution containing no inhibitor were heated sep. to 100°F. 30 days. At the end of this time, the 1st portion containing I showed only a small amount of solids while the 2nd solution was cloudy and showed a great deal of solids. When the temperature of the 2 solns. was lowered to 60°F., solid deposition occurred in each portion. The 2 solns. were heated to 120°F. with stirring. The solid material in the inhibited portion disappeared, while the solid material in the uninhibited solution remained unchanged. In place of I, 4,4-bis(4-hydroxy-3-methyl-2-oxabutyl)-2-heptadecyl-2-oxazoline, 4,4-bis(4-hydroxy-3-ethyl-2-oxabutyl)-2-nonyl-2-oxazoline, 4,4-bis(10-hydroxy-2,5,8-trioxadecyl)-2-heneicosyl-2-oxazoline, or 4,4-bis(16-hydroxy-2,5,8,11,14-pentaoxaheptadecyl)-2-henedecyl-2-oxazoline could be used.

L8 ANSWER 104 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1965:59524 HCAPLUS  
 DOCUMENT NUMBER: 62:59524  
 ORIGINAL REFERENCE NO.: 62:10587g-h  
 TITLE: Modified viscose  
 PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.  
 SOURCE: 2 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1371032		19640828	FR 1963-949754	19631007 <--

PRIORITY APPLN. INFO.: DE 19621006  
 AB 2-Alkyloxazolines, which contain a polyglycol ether group in the 4-position, are added to a viscose or an acid precipitation bath containing a viscose to inhibit swelling of the fibers. Thus, the addition product of 20 moles ethylene oxide and 2-undecyl-4-methyl-4-hydroxymethyloxazoline is added at 2 g./l. to a viscose spinning bath (60°) containing (per l.) 63 g. H2SO4, 60 g. ZnSO4, and 165 g. Na2SO4 to give fibers which are smooth and have good phys. properties.

L8 ANSWER 105 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1964:404112 HCAPLUS  
 DOCUMENT NUMBER: 61:4112  
 ORIGINAL REFERENCE NO.: 61:618f-g  
 TITLE: Periodate oxidation of 4- $\alpha$ -hydroxyalkyl-2-oxazolines  
 INVENTOR(S): Wehrmeister, Herbert L.  
 PATENT ASSIGNEE(S): Commercial Solvents Corp.  
 SOURCE: 2 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3128295		19640407	US 1961-113665	19610531 <--

PRIORITY APPLN. INFO.: US 19610531  
 AB 2-Phenyl-4-methyl-4-hydroxymethyl-2-oxazoline (19 g.) was added to a solution of 25 g. periodic acid in H2O, and the mixture shaken 24 hrs. at room temperature to give 14.1 g. PhCO2CH2COMe, b. 100-3°. Similarly, 10.5 g. 2-phenyl-4,4-bis(hydroxymethyl)-2-oxazoline gave 5 g. PhCO2CH2CO2H, m. 111-11.5° (H2O).

L8 ANSWER 106 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1964:72039 HCAPLUS  
 DOCUMENT NUMBER: 60:72039  
 ORIGINAL REFERENCE NO.: 60:12690a-b  
 TITLE: Adsorption of some organic surfactants on rutile surfaces. Electron microscope studies  
 AUTHOR(S): Cheever, Gordon D.; Bobalek, Edward G.  
 CORPORATE SOURCE: Case Inst. of Technol., Cleveland, OH  
 SOURCE: Industrial & Engineering Chemistry Fundamentals (1964), 3(2), 89-94  
 CODEN: IECFA7; ISSN: 0196-4313  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 AB Polycryst. films of rutile were exposed to adsorbable unsatd. organic compds. in both vapor and liquid phase and stained with OsO4 or Br vapor to develop more dense contrast of adsorbed structures for observation with the electron microscope. This technique revealed that adsorption of such organics does not involve uniform coverage of the surface. The collection of organic material was restricted to active patches or sites on the surface. The number of these active sites was .apprx.108/cm.2 At least for adsorption from vapor phase, data of size and number of adsorbed species as a function of temperature can be interpreted by theories of classical nucleation (as developed by Becker and Doering, CA 30, 16416) and of chemisorption on active sites.

L8 ANSWER 107 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1964:15621 HCAPLUS

DOCUMENT NUMBER: 60:15621  
 ORIGINAL REFERENCE NO.: 60:2705d-e  
 TITLE: Oxazoline salt-modified organophilic clay  
 INVENTOR(S): Shaler, Richard G., Jr.; McAdam, Raymond L.; Shaler, Richard G.  
 PATENT ASSIGNEE(S): Inerto Co.  
 SOURCE: 3 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 3109847		19631105	US 1961-101348	19610407 <--
AB	Clays which gel hydrocarbon liquids are prepared by treating the mineral with an oxazoline salt with a C8-24 sidechain. Clays having high base-exchange capacity, such as hectorite, are most effectively treated. Thus, 9 ml. 2-heptadecenyl-4,4-dimethyl-2-oxazoline was titrated to pH 5 with 7.5 ml. 2N HCl, and the salt was added to 25 g. hectorite in 500 ml. water. Addition of benzene rapidly expelled water from the clay which was then air-dried. The organophilic clay (5 g.) was used to gel 25 ml. benzene, toluene, gasoline, and naphtha. The HCl can also be added to a clay-oxazoline aqueous slurry. Removal of water without adding benzene yielded products which were less desirable gellants.				

L8 ANSWER 108 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1963:414740 HCAPLUS  
 DOCUMENT NUMBER: 59:14740  
 ORIGINAL REFERENCE NO.: 59:2571f-g  
 TITLE: Motor fuel containing substituted oxazoline compounds  
 INVENTOR(S): De Gray, Richard J.  
 PATENT ASSIGNEE(S): Standard Oil Co.  
 SOURCE: 5 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 3033661		19620508	US 1959-833971	19590817 <--
	DE 1163601			DE	
GI	For diagram(s), see printed CA Issue.				
AB	Small quantities of an oxazoline compound of the formula I, where R is a C7-19 saturated or unsatd. hydrocarbon radical, R' is (CH2)1-3OH, and R" is H, R' or a C1-3 lower alkyl radical, combined with a lowmol.-weight alkyl alc. are excellent motor-fuel additives for anti-freezing. Thus, when 0.0035 weight % Oxazoline T (I, R = C17H33, R' = R" CH2OH) was added with 1% MeOH to a fuel A.P.I. gravity 61.7°, b. 93-420°F., and containing 3 ml. Et4Pb/ gal. and 0.4 weight % H2O, its octane rating was raised from 58 to 76 and it did not freeze until -20°F.				

L8 ANSWER 109 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1963:408686 HCAPLUS  
 DOCUMENT NUMBER: 59:8686  
 ORIGINAL REFERENCE NO.: 59:1528h,1529a-d  
 TITLE: Synthesis of  $\beta$ -dolabrin from  $\beta$ -thujaplicin (hinokitiol)  
 AUTHOR(S): Seto, Shuichi; Matsumura, Shingo; Ro, Katsuo  
 CORPORATE SOURCE: Tohoku Univ., Sendai, Japan  
 SOURCE: Chemical & Pharmaceutical Bulletin (1962), 10, 901-5  
 CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB The BF<sub>2</sub> compound (I) of  $\beta$ -thujaplicin (hinokitiol) (II) was converted readily to the 8-Br derivative (III), which gave  $\beta$ -dolabrin (IV) on treatment with a base in EtOH. II (1 g.) treated with BF<sub>3</sub>-Et<sub>2</sub>O under ice-cooling evolved HF and yielded 1.4 g. I, m. 178-9°. I (4.5 g.) refluxed 5 hrs. on a water bath with Br in CHCl<sub>3</sub>, or mixed with Br in CHCl<sub>3</sub> and irradiated under sunlight 5-10 hrs. yielded 5.6 g. III, m. 188-9° (decomposition). III was obviously different from the isomer (V), m. 115-16°, prepared from the 7-Br derivative of II by treatment with BF<sub>3</sub>-Et<sub>2</sub>O. III (1.5 g.) was heated 15 min. with 1.5 g. AcONa in EtOH, the EtOH evaporated, H<sub>2</sub>O added to the residue, and the mixture heated 10 min.

to give an oil, which at pH 3 was extracted with CHCl<sub>3</sub> and the residue from the extract treated with (AcO)<sub>2</sub>Cu in H<sub>2</sub>O to yield 50 mg. khaki-colored Cu complex (VI) of IV, m. 196-8°, and 600 mg. green Cu complex (VII) of the 8-EtO derivative (VIII) of II, m. 188-9°. Passing H<sub>2</sub>S through VI and VII separately in CHCl<sub>3</sub> solution and removing CuS by filtration and CHCl<sub>3</sub> by evaporation gave IV, m. 58°, and VIII, m. 47-8°, resp. VI and VII were similarly isolated by using Et<sub>3</sub>N in place of AcONa in the preceding procedures with III, whereas only VII resulted when C<sub>5</sub>H<sub>5</sub>N or NaOH were used in place of AcONa. Stirring 11 g. III with NaOH in MeOH and treating the mixture as above yielded 6 g. green Cu complex of the 8-MeO derivative (IX) of II, m. 228-30°, which, treated with H<sub>2</sub>S as were VI and VII, gave IX, m. 67-8°. Stirring 1 g. III with tert-BuOK in tert-BuOH 1 hr. at room temperature gave an oil, which was sublimed at 100° in vacuo to yield 0.2 g. IV. III heated 5 min. with Me<sub>2</sub>SO on a water bath gave the BF<sub>2</sub> compound (X) of IV, m. 152-3°, formed also by the action of BF<sub>3</sub>-Et<sub>2</sub>O on IV as in the preparation of I. The structures of VIII and IX were confirmed by their nuclear magnetic resonance spectra (curves shown). The structure of IX was further confirmed by its failure to produce a hinopurpurin derivative on treatment of its 5-tolylazo compound (XI), m. 139-40°, with dilute HCl; instead, XI was recovered. Ultraviolet absorption data were reported in support of the structures of I, III, V, and VIII-XI.

L8 ANSWER 110 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:408242 HCAPLUS

DOCUMENT NUMBER: 59:8242

ORIGINAL REFERENCE NO.: 59:1429c-d

TITLE: Oxazolines as antistripping agents in asphalt pavings

INVENTOR(S): Butter, George N.

PATENT ASSIGNEE(S): Commercial Solvents Corp.

SOURCE: 3 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3085891	----	19630416	US 1959-840547	19590917 <--
PRIORITY APPLN. INFO.:			US	19590917

AB An oxazoline with an alkyl or alkenyl hydrocarbon radical of 9-30 C atoms bound to the carboxamide C of the oxazoline group, such as 2-heptadecyl-4,4-bis(hydroxymethyl)-2-oxazoline, is dissolved in C<sub>6</sub>H<sub>6</sub>, EtOH, or other comparative type solvents to produce a 60-70% by weight solution. This solution is then mixed with an aqueous emulsion containing 65% by weight of the asphalt to give a 0.3-1.0% by weight oxazoline mixture. The mixing is done at 70-125°F. When such a treated asphalt was used to coat siliceous



surfaces, 87-98% of the total aggregate area remained covered after stirring in H2O at 60 r.p.m. for 3 min. The untreated asphalt gave only 40% coverage when treated by the same test procedure.

L8 ANSWER 111 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1963:408241 HCAPLUS  
 DOCUMENT NUMBER: 59:8241  
 ORIGINAL REFERENCE NO.: 59:1429a-c  
 TITLE: Lubricating greases  
 INVENTOR(S): Agius, Peter J. V. J.; Morris, Arthur L.; Winward, Antony  
 PATENT ASSIGNEE(S): Esso Research and Engineering Co.  
 SOURCE: 3 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3083160		19630326	US 1959-851021	19591105 <--
PRIORITY APPLN. INFO.:			GB	19581111

AB Lubricating greases suitable for use in nuclear reactors are thickened with carbon black and contain 5-50% by weight of certain hydrocarbon polymers (I), Preferred I, having mol. wts. up to 10,000, are polyisobutylene (II), polyethylene, or polypropylene. With oils of 5-20 centistokes viscosity at 210°F., the use of a copolymer, such as butyl rubber, in addition to I, is desirable. Lubricants are prepared by dissolving I plus an anti-oxidant in the oil at 120° and then adding this mixture slowly to carbon black while stirring. Thus, a mixture of phenol-extract oil (viscosity of 60.2 centistokes at 210°F.) 47.4, II (mol. weight of 1000) 31.6, C2H2 black 20, and phenyl-β-naphthylamine 1% by weight formed a lubricating grease which had a leakage of 0.1 g. in a wheel bearing test at 150° and a penetration of 294 which changed to 305 after exposure to 1 + 108 rads and to 310 after exposure to 3 + 108 rads.

L8 ANSWER 112 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1963:83404 HCAPLUS  
 DOCUMENT NUMBER: 58:83404  
 ORIGINAL REFERENCE NO.: 58:14367c-e  
 TITLE: Improved procedures for preparation and characterization of Myrothecium cellulase. IV. Characterization of activity toward β-methyl glycosides of 1 → 4-β-D-oligoglucosides  
 AUTHOR(S): Hanstein, Else G.; Whitaker, D. R.  
 CORPORATE SOURCE: Natl. Res. Council, Ottawa  
 SOURCE: Can. J. biochem. Biophys. (1963), 41, 707-18  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 AB cf. ibid. 667-70, 671-96, 697-705. Two methods for the preparation of β-methylglycosides of 1 → 4-β-D-oligoglucosides are described. In method I, the parent oligoglucoside is acetylated, acetylated, methylated, fractionated on Magnesol, and deacetylated. In method II, an acetolysate of cellulose is acetylated, methylated, deacetylated, and fractionated on Darco G60 charcoal. The parameters Km and k2 for the hydrolysis of β-methylcellotetraoside by purified Myrothecium cellulase at pH 5.0 and 28.6° were estimated to be 4.1 + 10-4M and 570 min.-1, resp. The initial hydrolysis products of β-methylcellotetraoside and β-methylcellopentaoside indicate that the interior but not the terminal linkages are hydrolyzed by the

enzyme.

L8 ANSWER 113 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:83403 HCAPLUS

DOCUMENT NUMBER: 58:83403

ORIGINAL REFERENCE NO.: 58:14367b-c

TITLE: The enzyme hydrolyzing flavine mononucleotide (FMN) in plants. II. Phosphotransferase activity of the partially purified enzyme from *Phaseolus radiatus* Kumar, S. A.; Vaidyanathan, C. S. Indian Inst. Sci., Bangalore Biochimica et Biophysica Acta, Specialized Section on Enzymological Subjects (1963), 73(1), 98-104 CODEN: BBASD9; ISSN: 0926-6569

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The preparation of the enzyme hydrolyzing FMN whose partial purification from green-gram exts. is described in the preceding paper, has been shown to possess phosphotrans-ferase activity. The enzyme could transfer the phosphate group cleaved from FMN to acceptors like thiamine, pyridoxal, pyridoxamine, and nucleosides, resulting in the formation of their corresponding phosphate esters and nucleotides. The properties of the enzyme hydrolyzing FMN and the phospho-transferase activity of the preparation are compared.

L8 ANSWER 114 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:73345 HCAPLUS

DOCUMENT NUMBER: 58:73345

ORIGINAL REFERENCE NO.: 58:12568b

TITLE: Boron-containing oxazolines

INVENTOR(S): Belden, Sarah H.

PATENT ASSIGNEE(S): Standard Oil Co.

SOURCE: 4 pp.; Division of U.S. 2,948,597 (CA 55, 23999h)

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3070603	---	19621225	US 1959-859547	19591125 <--
PRIORITY APPLN. INFO.:			US	19591125

AB The disclosures are similar, but the claims are different.

L8 ANSWER 115 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:66513 HCAPLUS

DOCUMENT NUMBER: 58:66513

ORIGINAL REFERENCE NO.: 58:11367e-h

TITLE: Penicillins

INVENTOR(S): Farrington, John A.; Hull, Roy; Sexton, Wilfred A.

PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd.

SOURCE: 3 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 916205	---	19630123	GB 1960-41968	19601206 <--
PRIORITY APPLN. INFO.:			GB	19601206

GI For diagram(s), see printed CA Issue.

AB Penicillins (I) were prepared with antibacterial activity towards penicillin-resistant staphylococci and more stability to acids than known penicillins. I may be in the form of their NH<sub>4</sub>, Na, K, Ca, or Ba salts, or salts of organic bases. I were prepared by interaction of 6-aminopenicillanic acid (II) or a salt thereof and a trithiocarbonate at pH 4 to 11 in the presence of NaOH, KOH, or N-methylmorpholine and in aqueous acetone or CHCl<sub>3</sub>. A solution of 216 parts III in 500 parts H<sub>2</sub>O and 303 parts N-methylmorpholine was treated with a solution of 580 parts dibenzyl trithiocarbonate in 5000 parts acetone. The mixture was kept at 20° for 9 days. Vacuum concentration gave an oil which was dissolved in 5000 parts H<sub>2</sub>O and 4000 parts iso-BuCOMe (III). The mixture was separated and the lower layer washed twice with 4000 parts III. The aqueous solution (pH 2.5 with N

HCl) was extracted 3 times with 4000 parts III. The combined exts. were stirred with 5000 parts H<sub>2</sub>O and the pH adjusted to 7.5 with aqueous N NaOH. The mixture was separated and the aqueous layer freeze-dried to give the crude Na salt of 6-benzylthiothiocarbonylamino penicillanic acid, (I, R = benzyl) (46% pure). I or their salts may be the sole active ingredient or may be compounded with known penicillins or their salts in any of the conventional pharmaceutical forms known for penicillin therapy.

L8 ANSWER 116 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1963:66512 HCAPLUS  
 DOCUMENT NUMBER: 58:66512  
 ORIGINAL REFERENCE NO.: 58:11367d-e  
 TITLE: Oxazoline polyether derivatives  
 INVENTOR(S): Butter, George N.; Frump, John A.  
 PATENT ASSIGNEE(S): Commercial Solvents Corp.  
 SOURCE: 8 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 618474		19620928	BE	<--
FR 1323473			FR	
PRIORITY APPLN. INFO.:			US	19610605

AB Olefin oxides undergo base-catalyzed addition to 4,4-bis(hydroxymethyl)-2-alkyl (or alkenyl)-2-oxazolines to produce  $\omega$ -hydroxyethyl ethers or polyethers depending on the quantity of alkene oxide used. Tertiary amines or quaternary amine hydroxides, alkali metal alkoxides, or other alkaline materials, soluble in organic solvents, may serve as catalysts. The products are useful as wetting agents, dispersants for pigments, and as intermediates in preparing other surfactants.

L8 ANSWER 117 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1963:40523 HCAPLUS  
 DOCUMENT NUMBER: 58:40523  
 ORIGINAL REFERENCE NO.: 58:6965f-h  
 TITLE: Glass fibers reinforced by treating with oxazolines or imidazolines  
 INVENTOR(S): Wong, Robert; Wise, Belford D.  
 PATENT ASSIGNEE(S): Owens-Corning Fiberglas Corp.  
 SOURCE: 5 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 3056705 19621002 US 1958-743168 19580619 <--  
 GI For diagram(s), see printed CA Issue.  
 AB A water-steam dispersion of oxazolines (I) or imidazolines, (II) of pH 7.3 should be blown through the freshly produced glass fibers which should still be hot. The constituents R, R1R2, and R3 may be H, a C1-4 alkyl radical, or a substituted C1-4 alkyl radical where the substituent may be an aldehyde, sulphydryl, nitrile, amide, amine, halide, or OH group. R4 should be a hydrocarbon having 9-22 C atoms. The glass fibers after being coated this way should be bonded together by a hardened phenolic binder which should contain 0.01-2.5% chitin. The treatment provides a coating which prevents the adsorption of moisture without increasing the rate of ion migration from the fiber.

L8 ANSWER 118 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1962:3138 HCAPLUS  
 DOCUMENT NUMBER: 56:3138  
 ORIGINAL REFERENCE NO.: 56:639d-e  
 TITLE: Motor-fuel additive  
 PATENT ASSIGNEE(S): Standard Oil Co.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 846231		19600831	GB 1959-1129	19590112 <--
			US	19580226

PRIORITY APPLN. INFO.:  
 AB The addition of substituted oxazolines, such as 2-heptadecenyl-4,4-bis(hydroxymethyl)oxazoline, to gasoline reduces surface ignition and carburetor fouling and icing.

L8 ANSWER 119 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1961:127579 HCAPLUS  
 DOCUMENT NUMBER: 55:127579  
 ORIGINAL REFERENCE NO.: 55:23999h-i,24000a  
 TITLE: Boron-containing substituted oxazolines for addition to gasoline  
 INVENTOR(S): Belden, Sarah H.  
 PATENT ASSIGNEE(S): Standard Oil Co.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2948597		19600809	US 1958-783670	19581230 <--

GI For diagram(s), see printed CA Issue.  
 AB B-containing substituted oxazolines of the type RC:N.C(X)(Y).CH2.O (I) are prepared. Thus, a mixture of 36.9 g. I (R = C17H33; X = Y = CH2OH), 28.8 g. of 2-methyl-2,4-pentanediol H borate, and 200 cc. C6H6 were azeotropically distilled until 3.4 g. H2O was removed. The glassy liquid I obtained (R = C17H33; X = Y = CH2O.B.O.C(Me2).CH2.CH(Me).O) is soluble in gasoline and resistant to hydrolysis at 90% relative humidity and room temperature overnight.  
 Prepared similarly were I with R = C17H33; X = CH2OH; Y = CH2O.B.O.C(Me2).CH2.CH(Me).O and I with R = C17H33; X = H; Y = CH2O.B.O.C(Me2).CH2.CH(Me).O. The oxazolines prepared are soluble, stable gasoline additives.

L8 ANSWER 120 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1961:127578 HCAPLUS

DOCUMENT NUMBER: 55:127578  
 ORIGINAL REFERENCE NO.: 55:23999g-h  
 TITLE: Increasing the color stability of solvent-treated lubricating oils and waxes  
 INVENTOR(S): Behn, Robert A.; Sandlin, Hansford L.  
 PATENT ASSIGNEE(S): Socony Mobil Oil Co., Inc.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2984621		19610516	US 1958-761909	19580918 <--
AB		The period between regenerations for a percolation unit using clay for filtering lubricating oils is extended nearly 3 times by maintaining the unit at 150°F., and blanketing with flue gas containing < 1% O or nonoxidizing gas, the lubricating oil fractions and waxes between the extraction and dewaxing steps or during storage between, before, and after percolation.		

L8 ANSWER 121 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1961:51183 HCAPLUS  
 DOCUMENT NUMBER: 55:51183  
 ORIGINAL REFERENCE NO.: 55:9856h-i  
 TITLE: Phosphonate gasoline additives  
 INVENTOR(S): Ries, Herman E., Jr.  
 PATENT ASSIGNEE(S): Standard Oil Co.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2965460		19601220	US 1955-488981	19550217 <--
AB		Compds. of the structure $RP(:O)(OH)OR'$ , in which R' is H or an alkyl group with <10 C atoms are used in concns. of 0.00001%-0.1% by weight for fuel improvement. Anticorrosion properties are demonstrated for the mono-Me esters of octadecyl-, dodecyl-, and hexadecylphosphonic acids.		

L8 ANSWER 122 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1961:51182 HCAPLUS  
 DOCUMENT NUMBER: 55:51182  
 ORIGINAL REFERENCE NO.: 55:9856h  
 TITLE: Ammonium nitrate as additive for gasolines  
 INVENTOR(S): Del Mare, Raul  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IT 565722		19570802	IT	<--
AB		Addition of 0.2-0.6% $NH_4NO_3$ prepared from $Ba(NO_3)_2$ and $NH_4OH$ is used to increase the efficiency of fuels for internal-combustion engines.		

L8 ANSWER 123 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1961:51181 HCAPLUS  
 DOCUMENT NUMBER: 55:51181  
 ORIGINAL REFERENCE NO.: 55:9856g-h

TITLE: Oxazoline borate gasoline additives  
 INVENTOR(S): De Gray, Richard J.; Belden, Sarah H.  
 PATENT ASSIGNEE(S): Standard Oil Co.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 2965459		19601220	US 1959-795349	19590225 <--
AB	Title compds. in the range of 0.0025-0.05% by weight gave improved carburetor cleanliness, acted as anti-icing agents, and tended to suppress surface ignition. For preparation, 100 parts 2-heptadecenyl-4,4-bis(hydroxymethyl)oxazoline (I) dissolved in 200 parts C6H6 was added to 16.8 parts H3BO3. Azeotropic distillation yielded a cyclic acid ester (II), a clear liquid soluble in gasoline. Further dehydration of II, yielded the dimer. An analogous reaction gave a similar product from 2-heptadecenyl-4-methyl-4-hydroxymethyl-oxazoline.				

L8 ANSWER 124 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1961:35085 HCAPLUS  
 DOCUMENT NUMBER: 55:35085  
 ORIGINAL REFERENCE NO.: 55:6848e-g  
 TITLE: Motor fuels containing substituted oxazoline compounds  
 PATENT ASSIGNEE(S): Standard Oil Co.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	GB 846231		19600831	GB 1959-1129	19590112 <--
	DE 1099263			DE	
	US 3033663		19620508	US 1958-717549	19580226 <--
GI	For diagram(s), see printed CA Issue.				
AB	The formation of combustion-chamber deposits and icing of the carburetor are decreased by addition of 0.0025-0.1% by weight of an oxazoline of the general formula RC:N.C(R')(R'').CH2.O, in which R is a hydrocarbon radical containing 7-19 C atoms; R' is (CH2)nOH (n = 1-3); R'' = R', H, or a Cl-3 alkyl radical. The carburetor cleanliness rating (0 for the throttle plate and barrel loaded with deposits, 100 for perfectly clean) of a fuel b. 98-424°F., A.P.I. gravity 62.4° and Reid vapor pressure 8.75 was increased from 60 to 93 on addition of 0.05 weight % "Oxazoline-II" 2-heptadecenyl-4,4-bis(hydroxymethyl)oxazoline. The octane number and anti-icing rating of this fuel increased from 101.18 to 101.34, and from 58 to 92, resp.				

L8 ANSWER 125 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1960:50557 HCAPLUS  
 DOCUMENT NUMBER: 54:50557  
 ORIGINAL REFERENCE NO.: 54:9964i,9965a-f  
 TITLE: Hydrazinium salts  
 PATENT ASSIGNEE(S): Ohio State University Research Foundation  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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GB 824357 19591125 GB 1956-32434 19561024 <--

AB Quaternary hydrazinium salts, particularly chlorides, were prepared on a com. scale from chloramine, gaseous or in solution, and any of a wide variety of liquid tertiary amines in the presence of NH<sub>3</sub> and, if desired, N to produce a salt of the general formula (RR'R''NNH<sub>2</sub>)Cl- where R, R', and R'' represented alkyl, carbocyclic, or heterocyclic radicals or C-containing residues. The reaction preferably was carried out in an inert solvent. Thus, a gaseous NH<sub>2</sub>Cl-NH<sub>3</sub>-N mixture was bubbled into liquid Me<sub>3</sub>N at -30°. A white precipitate formed as reaction progressed. This was recrystd. from EtOH-EtOAc to give 95% (Me<sub>3</sub>NNH<sub>2</sub>)Cl, m. 245° (decomposition). Et<sub>3</sub>N gave substantially a quant. yield of the tri-Et analog, m. 177-8°; picrate m. 214-5°. The amine used, % yield, m.p. of product, and descriptive notations of other examples were: com. Me<sub>2</sub>NC16H<sub>33</sub>, 80, 226-37°, -; Me<sub>2</sub>NC<sub>2</sub>H<sub>4</sub>OH, -, 160-3°, -; Et<sub>2</sub>NC<sub>2</sub>H<sub>4</sub>OH, 99, -, hygroscopic paste, picrate m. 179.5-180.5°; Et<sub>2</sub>NC<sub>6</sub>H<sub>11</sub>, 85.5, 169-72°, -; Me<sub>2</sub>NPh, -, 187-8°, long flat needles, hexachloroplatinate m. 156-7°; Et<sub>2</sub>NPh, 65-6, 197-8°, -; dimethyl-p-toluidine, -, 166°, -; N-methylmorpholine, 55, 196-8°, -. The amine used, m.p. of product, and descriptive notations of still other examples were: Pr<sub>3</sub>N, -, hexafluorophosphate m. 202.5-3.5°; Bu<sub>3</sub>N, -, hexafluorophosphate m. 87.5-88.5°; (C<sub>6</sub>H<sub>13</sub>)<sub>3</sub>N, -, hexafluorophosphate m. 80-1°; (C<sub>7</sub>H<sub>15</sub>)<sub>3</sub>N, 65.5-66.5°, hexafluorophosphate m. 98-9°; Me<sub>2</sub>NC18H<sub>37</sub>, 167-72° (decomposition), hexafluorophosphate m. 154-176°; dimethyl-"soy"-amine, -, paste, hexafluorophosphate m. 172-5°; Et<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>OH, 115-16°, -; MeN(C<sub>2</sub>H<sub>4</sub>OH)<sub>2</sub>, -, oil, no solid derivs.; PhN(C<sub>2</sub>H<sub>4</sub>OH)<sub>2</sub>, -, sublimed 206-10°; N(C<sub>2</sub>H<sub>4</sub>OH)<sub>3</sub>, 178-80°, -; Me<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CN, -, -; Me<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub>, -, very hygroscopic; Et<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub>, -, -; p-C<sub>8</sub>H<sub>17</sub>C<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>NMe<sub>2</sub>, -, paste, hexafluorophosphate m. 76°; N,N,N',N'-tris(2-hydroxyethyl)N'-octadecyl-1,3-propylenediamine, -, paste, hexafluorophosphate, m. 186-94°; bis(hydroxyethoxyethoxyethyl)-"tallow"-amine, 150-90°, paste and solid; bis(2-hydroxyethyl)dehydroabietylamine, 201-6°, -; Pr<sub>2</sub>NC<sub>6</sub>H<sub>5</sub>, -, hexafluorophosphate m. 135-6°; com. mixture of o (and p)-dimethylaminomethylphenol, 103-10°, -; tris(dimethylaminomethyl)phenol, -, hygroscopic and gum; N-(2-hydroxyethyl)morpholine, 152-4°, -; nicotine, -, hygroscopic gum; 4-dimethylamino-1,5-dimethyl-2-phenyl-3-phenyl-3-pyrazolone, 147°, hexafluorophosphate m. 178-80°; 4,4-bis(hydroxymethyl)-2-heptadecyloxazoline, 201°, -; hexamethylenetetramine, 190-6°, hexafluorophosphate m. 203° (decomposition); brucine, 254° (decomposition), hexafluorophosphate m. 204° (decomposition); quinine, 166-8°, -.

L8 ANSWER 126 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1960:6302 HCAPLUS

DOCUMENT NUMBER: 54:6302

ORIGINAL REFERENCE NO.: 54:1244a-c

TITLE: Substituted oxazoline corrosion inhibitors

INVENTOR(S): Butter, Geo. N.

PATENT ASSIGNEE(S): Commercial Solvents Corp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2905644		19590922	US 1956-599681	19560724 <--
AB				
Substituted oxazolines dissolved in mineral oil in amts. of 100 p.p.m. effectively prevent corrosion of ferrous metals in the presence of H <sub>2</sub> O. Both 2-(8-heptadecenyl)-4,4-bis(hydroxymethyl)-2-oxazoline and				

2-heptadecyl-4,4-bis(hydroxymethyl)-2-oxazoline, prepared by the method of Wamper (C.A. 40, 52734), are effective. Complete protection was obtained in static tests. Cf. Baker, et al., C.A. 43, 2420g.

L8 ANSWER 127 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1959:26210 HCAPLUS  
 DOCUMENT NUMBER: 53:26210  
 ORIGINAL REFERENCE NO.: 53:4783a-b  
 TITLE: Detergent suds boosters  
 PATENT ASSIGNEE(S): Unilever Ltd.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	GB 800291		19580820	GB 1957-6714	19570228 <--
AB	The foam stabilities of spray-dried anionic organic detergent compns. are improved by incorporation of 0.5-5% 2-alkyl-4,4-bis(hydroxymethyl)oxazolines containing alkyl groups of 9-13 C atoms. The preferred compound is 2-hendecyl-4,4-bis(hydroxymethyl) oxazoline.				

L8 ANSWER 128 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1951:57403 HCAPLUS  
 DOCUMENT NUMBER: 45:57403  
 ORIGINAL REFERENCE NO.: 45:9790d-g  
 TITLE: Phytotoxicity of imidazoline derivatives and related compounds  
 AUTHOR(S): Allen, Seward E.; Skoog, Folke  
 CORPORATE SOURCE: Univ. of Wisconsin, Madison  
 SOURCE: Plant Physiology (1951), 26, 611-24  
 CODEN: PLPHAY; ISSN: 0032-0889  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable

AB The toxicity of 10 1-isopropyl-4,4-dimethyl-2-imidazolines (I) with alkyl groups substituted in the 2-position was a function of the length and degree of unsatn. of the alkyl group. Compds. with alkyl groups of 5 or less carbons were only slightly toxic; those with 7, 9, and 11 were extremely toxic; and those with 17 in a saturated chain were only moderately toxic. The presence of one or more double bonds near the middle of the C17 chain increased toxicity. A comparable series of 4-methyl-4-hydroxymethyl-2-oxazolines differing only in the nature of the R-group at 2-position was much less toxic, but showed a similar relation between chain length and toxicity. The substitution of one or more OH groups for H atoms in the Me groups in the 4-position markedly reduced the toxicity. Related compds., such as hexahydropyrimidines and imidazolidinethiones, also possessed toxic properties which were largely removed by the incorporation of OH groups into the mols. The most toxic I derivs. applied as sprays to young tomato plants were lethal at 0.05%, whereas the least toxic ones produced no visible effects at 1%. The toxic I were effective respiratory inhibitors, but were poorly translocated through plant tissues, and were inactivated by contact with soil. In greenhouse tests, corn, wheat, and lambsquarter were found to be relatively resistant; soybeans, table beets, peas, and redroot pigweed were moderately sensitive; and tomatoes and wild mustard were readily killed by low concns. of I with 9 and 11 C.

L8 ANSWER 129 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1951:5968 HCAPLUS  
 DOCUMENT NUMBER: 45:5968  
 ORIGINAL REFERENCE NO.: 45:1005b-c,1006a



TITLE: Rust-preventive compositions  
 INVENTOR(S): Bishop, John W.  
 PATENT ASSIGNEE(S): Tide Water Associated Oil Co.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2527296		19501024	US 1948-22503	19480421 <--

AB A new rust-preventive solution for protecting ferrous metals in humid atmospheric is

composed of a suitable liquid vehicle (mineral oils, naphtha, or aromatic solvents) in which 0.1-10% of a salt formed by an acid ester of a P acid (alkyl acid phosphate or lauryl acid phosphate) with an oxazoline compound (2-oxazoline with a fatty acid, such as oleic acid attached to the ring C atom) and 0.5-15% of a metal sulfonate (Na salt of petroleum mahogany acid) are dissolved.

L8 ANSWER 130 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1950:35935 HCAPLUS  
 DOCUMENT NUMBER: 44:35935  
 ORIGINAL REFERENCE NO.: 44:6887g-i,6888a-b  
 TITLE: Acyloxymethyl oxazolines  
 INVENTOR(S): Tryon, Philip F.  
 PATENT ASSIGNEE(S): Commercial Solvents Corp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2504951		19500425	US 1944-553671	19440911 <--

GI For diagram(s), see printed CA Issue.

AB Esters of (hydroxymethyl)-2-oxazolines are obtained in 60-90% yields in a condensed 3-step synthesis. Thus the following steps, HOCH<sub>2</sub>C(NH<sub>2</sub>)R''CH<sub>2</sub>OH (I) + R'CO<sub>2</sub>H (V) → HOCH<sub>2</sub>C(NHCOR')R''CH<sub>2</sub>OH (II) → HOCH<sub>2</sub>CR''.CH<sub>2</sub>O.CR':N (III) + V → R'O<sub>2</sub>CCH<sub>2</sub>CR''.CH<sub>2</sub>O.CR':N (IV), where R' = alkyl or aryl and R'' = H, alkyl, or acyloxymethyl, may be carried out in one operation as follows: I and V (1:2) are heated for 10 hrs. at 150-240° while the water of reaction is removed with a water separator using C6H<sub>6</sub>. The following 2-oxazolines were prepared in this manner: 2-Phenyl-4-methyl-4-benzoxymethyl, 83% yield, b2-3 195-215°, d2020 1.156, nD20 1.569; 2-heptyl-4-methyl-4-octanoyloxymethyl, (76%) b1-2 170-80°, d2020 0.935, nD20 1.452; 2-nonyl-4-methyl-4-decanoyloxymethyl (78%), b1-2 200-10°, d2020 0.922, nD20 1.455; 2,4-diethyl-4-propionylloxymethyl (72%), b30 143°, d2020 1.015, nD20 1.446; 2-nonyl-4-ethyl-4-decanoyloxymethyl (63%), b1-2 200-20°, d2020 0.923, nD20 1.457; 2-propyl-4,4-dibutylroxymethyl (90%), b2-3 135-40°, d2020 1.047, nD20 1.453; 2-pentyl-4,4-dihexanyloxymethyl (83%), b2 170°, d2020 0.994, nD20 1.456; 2-heptyl-4,4-diocanoyloxymethyl (87%), b2 250-60°, d2020 0.960, nD20 1.458; 2-heptadecyl-4,4-distearoyloxymethyl (100%), m. 76°. When III is isolated and an acid other than V is added, the yield of IV is decreased. Examples follow: 2-hendecyl-4-methyl-4-propionylloxymethyl-2-oxazoline, 36% yield, b2-3 170-90°, d2020 0.943, nD20 1.452; 2-hendecyl-4-methyl-4-benzoxymethyl-2-oxazoline (60%), b1-2 210-30°, d2020 0.994, nD20 1.495; 2-phenyl-4-methyl-4-lauroylloxymethyl-2-oxazoline (47%), b1-2 235°, d2020 0.985, nD20 1.491. Cf. C.A. 39, 4894.2.

L8 ANSWER 131 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1946:26917 HCAPLUS  
 DOCUMENT NUMBER: 40:26917  
 ORIGINAL REFERENCE NO.: 40:5273c-f  
 TITLE: Reaction products of oxazolines with organic acids  
 INVENTOR(S): Wampner, Herbert L.  
 PATENT ASSIGNEE(S): Commercial Solvents Corp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2402791		19460625	US 1944-535207	19440511 <--

GI For diagram(s), see printed CA Issue.  
 AB Products useful as surface-active agents are obtained by combining approx. equimol. atms. of an oxazoline and a fatty acid or an aliphatic hydroxy acid, preferably in aqueous solution at 25-75°. The oxazoline has the formula RR'C.N:CR''O.CHR, in which R and R' represent H, alkyl, or -CH2OH groups and R'' represents H or alkyl. Thus the reaction of citric acid monohydrate 210 with 2-tridecyl-4-(hydroxymethyl)-4-ethyloxazoline 296 in H2O 1445 parts at 25-30° gave a product with good wetting powers in acid or neutral solution. Similar substances were obtained from citric acid 21 and 2-isopropyl-4-(hydroxymethyl)-4-methyloxazoline 15.7 in H2O 103 parts, and from 51.7 lactic acid 176, H2O 1000 parts, and oxazoline 272 parts derived from tris(hydroxymethyl)aminomethane and coconut oil fatty acids. Such products retain surface-active potency longer than those made from oxazolines and inorg. acids. Cf. C.A. 39, 5416.1.

L8 ANSWER 132 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1945:33222 HCAPLUS  
 DOCUMENT NUMBER: 39:33222  
 ORIGINAL REFERENCE NO.: 39:5416a-c  
 TITLE: Cosmetic astringents  
 INVENTOR(S): Wampner, Herbert L.  
 PATENT ASSIGNEE(S): Commercial Solvents Corp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2368075		19450123	US 1943-502017	19430911 <--

GI For diagram(s), see printed CA Issue.  
 AB To cosmetic preps. containing a metal salt astringent, such as AlCl3 and Al2(SO4)3, is added 5-30% of a reaction product of lactic acid (I) and an oxazoline (II) of the formula N:C(R').O.CH(R')CR2, in which R is H, HOCH2, or an alkyl group, and R is H or alkyl. Oxazolines included by the above generic formula and which may be utilized are 2-ethyl-4-(hydroxymethyl)-4-methyloxazoline, 2-isopropyl-4-(hydroxymethyl)-4-methyloxazoline, 2-heptyl-4-(hydroxymethyl)-4-ethyloxazoline, 2-tridecyl-4-(hydroxymethyl)-4-methyloxazoline, 2-octyl-4-(hydroxymethyl)-4-ethoxyoxazoline, 2-hendecyl-4-(hydroxymethyl)-4-methyloxazoline, 2-hendecyl-4-(hydroxymethyl)-4-ethyloxazoline, 2-heptyl-4-(hydroxymethyl)-oxazoline, 2-heptyl-4,4-bis(hydroxymethyl)oxazoline, 2-octyloxazoline, 2-hendecyl-4,4-bis(hydroxymethyl)-oxazoline, 2-hendecyloxazoline, 2-hendecyl-4,4-dimethyloxazoline and the like. I and II are employed in approx. equimol. quantities and the reaction is carried out in the presence of H2O with optional addition of EtOH to obtain a clear solution The

temperature may vary from 25 to 75°. The products obtained are compatible with commonly used metal salt astringents and are nontoxic to the skin nor harmful to textiles.

L8 ANSWER 133 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1945:29995 HCAPLUS  
DOCUMENT NUMBER: 39:29995  
ORIGINAL REFERENCE NO.: 39:4894a-d  
TITLE: 2-Oxazolines  
INVENTOR(S): Tryon, Phillip F.  
PATENT ASSIGNEE(S): Commercial Solvents Corp.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 2372409		19450327	US 1943-482758	19430412 <--
GI	For diagram(s), see printed CA Issue.				
AB	2-Oxazolines are made according to the scheme where R is H, alkyl, aryl, or $\alpha$ -acyloxyalkyl, R' is H, aryl, or alkyl, and R'' is H, alkyl, aryl, or $\alpha$ -hydroxyalkyl. Thus 161 g. Me2C(NO2)CH2OAc in 650 cc. MeOH and 15 g. Raney Ni is treated with 1000 lb. H at 35° for 6 hrs. After separating the catalyst the MeOH is distilled, a small quantity of benzene is added, and the mixture is heated slowly to 200°, the water being removed; finally, 2,4,4-trimethyl-2-oxazoline distills over. Similarly there are prepared 2-hendecyl-4,4-dimethyl-2-oxazoline, 2,4-dimethyl-4-acetoxymethyl-2-oxazoline, 2-phenyl-4,4-dimethyl-2-oxazoline, and 2-methyl-4,4-bis(acetoxymethyl)-2-oxazoline b3 125-7°. Cf. C.A. 39, 4336.2.				

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L10 0 OXAZOLINE/THU

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	ENTRY	SESSION

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